Lectures
ON THE
CLINICAL USES OF ELECTRICITY.

Delivered in University College Hospital,

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LECTURE IV.

V. Therapeutical Uses of Electricity continued: 6, in chorea; 7, in alterations of sensibility; 8, in spinal diseases, (a) "spinal paralysis," (b) spinal disease, with "cerebral paralysis"; 9, in disease of nerve, "local paralysis"; 10, in paralysis from blood disease, (a) lead-poisoning, (b) anæmia; 11, in local spasmodic diseases; 12, in painful affections, neuralgia, &c.

GENTLEMEN,—It will be well to consider here the electrical treatment of (6) chorea. Years ago it was said that good results were obtained; but I must say that, so far as my own experience goes, electricity has done no good in this disease. There are a vast number of cases of acute chorea that will get well if you leave them alone; and almost any form of treatment will appear to prove efficacious if it be taken in conjunction with change from a crowded dwelling house to a well-ventilated hospital ward, to good food and quiet. I believe a great deal of the influence set down to electricity, ice-bags, iron, arsenic, quinine, and other medicines has been imaginary; and that the really curative agents have been those that I have mentioned. The modes employed have been as various as the forms of electricity, and each one has landed in the treatment of chorea that particular form to which he is addicted; but, in my judgment, the less one says, in the present state of knowledge, about chorea and its treatment by electricity, the better will it be for therapeutical science.

7. I pass now to the consideration of some brain affections that are accompanied by alterations in sensibility. And, first, defective sensation, or anæsthesia. Anæsthesia of a limb, or of two limbs, is very rare, except in association with motor paralysis; and then, when it has occurred acutely, it usually exists only during the condition of shock. A patient, for instance, may become hemiplegic from an embolism, or from hæmorrhage; and you will find that during the first few minutes, or sometimes few hours, or, in rarer cases, days, after the onset of the attack, there may be some loss of sensibility. It varies in amount, but, during the condition of shock, may be occasionally well marked. But after that condition of shock has passed away the sensibility commonly returns; and, so far as electricity is concerned, all I have to say is that, during that time, it would be very unwise to use any form of electricity at all.

In certain brain diseases of slow development you may find loss of sensibility; but these are, comparatively speaking, rare. You every now and then meet with some portion of skin defective in sensibility, from a tumour in the head or some other cause. But it is much more common for you to find some modified sensibility, such as "pins and needles," or painful impressions when the skin is touched. In those cases of acute cerebral disease, however, in which you do find persistent anæsthesia, or even only diminished sensibility, it is very rare for you to find that electricity does any good. It may do harm, and I should advise you not to use it unless the case were of such sort that you used it only for the purposes of diagnosis, and then only in such a form as you feel quite sure can do no mischief.

The examples of anæsthesia in which electricity is most useful are to be found in that curious class, or rather medley, of cases that goes sometimes by the name of "hysterical"; for they are met with in women, and are found together with symptoms of the kind commonly regarded as hysterical. Here you meet with marked anæsthesia of the skin in different parts of the body, almost always associated with a certain amount of awkwardness of movement, and sometimes associated with some very definite loss of power. The two often go together, for both the apparent power of movement and the actual power of combining movements are distinctly related to the integrity of guiding sensations derived from impressions made upon the skin. I have known cases of this kind which had lasted for months or years, in which movements of the body or of certain limbs were weak and clumsy, and in which the patients, finding it awkward to use their limbs, had ceased to do so, and in whom, from disuse, the muscular power had become defective, but in which electricity has proved wonderfully useful; for sometimes, after only a few applications, the sensibility and motility have been restored completely. Electricity should here be employed in such manner as to produce a definite and distinct impression on the skin. Supposing there is anæsthesia of the skin of the leg, place one pole of a faradic apparatus in the patient's hand, attach to the other a dry metallic brush, and pass it over the surface of the skin. In that way you send in a number of little bright sparks, which you may see very plainly in the dark, and you sting the skin very briskly. Or you may take a charcoal conductor, or a metallic conductor, and move it up and down on the surface of the skin. In the first few moments perhaps the patient does not feel it at all, but you now and then find the sensibility of the skin return with marvellous rapidity. Sometimes you will find it is a better plan to take two thoroughly wetted sponges, and a tolerably strong current to make the muscles act briskly. By so doing, in the course of a few minutes the skin will often recover its sensibility. I am not able to explain thoroughly why this should be, but I have seen it again and again. An analogous condition is that in which the skin retains its sensibility while the muscles have lost their contractility, and in which by stinging the skin you will sometimes restore the muscular contractility.

Whatever may be their explanation, these are facts, and they have a certain relation to each other. In facial paralysis, for instance, by stimulating the skin, either by electricity or by a blister, you may often bring back the muscular action very speedily. Or, where there is a loss of sensibility of the skin, the muscles acting tolerably well, you may, by putting them into forced action, restore the sensibility of the skin. I think that most likely what one does under these circumstances is to stimulate that which is common to both muscle and skin—viz., vessels; and, further, that, in thus acting on the skin, we exert some influence on the nerve-trunks, and also on their central extremities.

You may accomplish the same end by franklinic electricity, by directing sparks from a prime conductor to the part affected, or by "charging" the patient, and taking sparks away from the surface by your knuckle or a brass ball. The effect of this application is that, in a little time, you redden the skin, and restore the sensibility. In extreme cases you may go still further, and apply a moderate charge from a Leyden phial. For instance, you may enclose a limb between the knob and the discharging rod, and let the shock go through it. This will sometimes bring back the sensibility when other means have failed.

8. There are two classes of spinal diseases to which I have already alluded, in one of which you have the true "spinal paralysis" of Dr. Marshall Hall; in the other of which you have "cerebral paralysis," although depending on spinal disease. In the one the muscle derives nothing from the cord, because the latter is diseased or destroyed; in the other the muscle is still associated with the cord, though that cord may be cut off from the brain.

(a) First, let us take the case of the true spinal paralysis. What can you do there electrically? The damage done to the cord is to be measured by the loss of electric irritability, and this whatever may be the form of electricity that you employ. If the electric irritability, in a case of this kind, be absolutely gone, and show no sign of reappearance after four or six applications, your prognosis is bad, and there is little or nothing to be gained by a persistence in the treatment.

Where you find a certain amount of contractility remaining there is a great deal to be done. You compare the limbs of your patient with the healthy limbs of someone of the same age and sex, same class of constitution and thickness of skin, and if you find contractility diminished somewhat, but not lost, there is much room for hope; and a great

deal will depend upon what you do as to the upshot of the case in the future.

Take, as an instance, the case of "infantile paralysis" (so-called "essential paralysis" of children)—one of the best examples you can have. A child is a little feverish for twenty-four hours; you find it cannot sit up, cannot move its arms or legs for a few days. Then it begins to move one arm a little, and perhaps one leg; after a day or two more, perhaps both arms. If you do not notice it again for a week, you may find one limb completely paralysed and the other partially; the distribution varying. Post-mortem examination in such a case shows very often disease of the spinal cord itself, running along its whole length; a disease which, when left to itself, eventuates in the destruction of the tissue of the spinal cord; producing in the first instance perfect spinal paralysis, and in the last instance perfect spinal paralysis also, but the former curable, the latter perfectly incurable. In the early stage you find a certain amount of contractility left, but that is very defective. Here very much may be done by electricity. You find also this curious point, that the muscles respond much more readily to a slowly interrupted current than to a rapidly interrupted current. To faradisation you find them defective, and sometimes you cannot get them to act at all. If you interrupt the battery current very rapidly, they sometimes will not act to it; but if you interrupt it slowly, you find that they do. And what is very interesting about these cases, and to which I have already alluded, is this: that the muscles sometimes appear to act much more readily than those in health to a very low current of galvanisation.

To such cases the battery current, slowly interrupted, should be applied with a wet sponge, in the manner I described the other day. It should be applied every day for a few minutes, not troubling yourselves, at first, about particular groups of muscles, but just applying it to the whole limb. If it is the leg, put one of your sponges on the sacrum, just below the groin, or in the gluteal region, and move the other sponge slowly down the front of the thigh, and then the back of the thigh and leg. You often find, under such circumstances, that after a day or two you have to use a stronger power to produce the effect that you produced at first; and you will find at the same time that the muscles respond more readily to faradisation. It is well then to change, and employ faradisation instead, using it with sponges well wetted, trying to pick out particularly certain sets of muscles which have a trick, as it were, of lagging behind the others. These are, especially, the extensors of the foot, the peronei, and the extensors of the fingers. Here, then, you may apply faradisation; and if the disease in the spinal cord be curable, I am sure you assist the process of cure. If the disease has existed for some time before the case is brought to you—and cases are often brought after three or four years' duration,—you will still find that occasionally you can do something. You may call into exercise the muscles of the limb; you can improve their nutrition and their strength; and you may do something towards effecting a change in the nutrition of the cord itself. Where, however, the disease has existed for some time, I have not seen that the repeated use of electricity has done much good, unless the improvement has been rapid at the commencement of treatment. You may see some enlargement of muscles, but there the improvement ends. When you find that, after four or six applications, there is no sign of electric contractility either by the induced or the battery current, it is useless to go on. I have managed every now and then to have cases treated for many months, with the forlorn hope that at some period or another there might be a ghost of contractility returning, but I must say it has been utterly unsuccessful.

(b) Let me now direct your attention to cases of paralysis, dependent upon spinal disease, in which there is not any true "spinal paralysis"; for the muscles still retain their connexion with a healthy portion of the medulla, although, owing to disease at a higher level of that medulla, they are completely paralysed to the will. In these cases electricity can accomplish but very little, and yet that very little may be of considerable service. Every now and then a certain group of muscles especially suffers; the sphincters of the bladder and rectum are very prone to be deranged. Sometimes the expulsive power is affected, sometimes the sphincter. It occasionally happens that, although you cannot in the smallest degree affect the limbs of the patient, you may give the patient a little more power over the sphincters. Probably the nutrition has failed, and the condition is something like that which I have already described. You may bring back power enough to make the sphincters competent; and to do that is to afford great relief. If you want to apply it to the sphincter of the bowel, the best plan is to put one sponge of the faradisation machine over the sacrum, and the other, well wetted, to the anus; and if you want to apply it to the sphincter of the bladder, you place one sponge, well wetted, on the perineum, just behind the scrotum, and the other over the symphysis pubis. By such means you may prevent the frequent involuntary passage of evacuations. I do not say that you will do it in all cases, but you will in some.

But, again, you get cases in which the disease of the spinal cord is such as to produce only incomplete paralysis. The limb is weak, the contractility is less than natural, and the nutrition is disposed to fail. Can electricity do any-any there? I think it may do a great deal; these constitute the class of cases in which it does very much good. But here you must observe the caution I gave you in the last lecture—not to use too strong a current of electricity during the early days of an acute illness. If you suppose the patient to be suffering from the effects of a recent myelitis, meningitis, or hæmorrhage into the cord, it is a very foolish thing to galvanise him. If, on the other hand, disease is creeping up slowly—e. g., white softening, or chronic myelitis, or if it depends upon syphilitic meningitis that may have occurred some time ago, and led to some slowly-induced pressure on the cord,—you may, in such cases of partial spinal paralysis, find electricity very useful.

Here it is that I would especially distinguish between the faradic and the battery current. Where there is wasting of the limb, the application of the battery current has appeared to me much more efficacious and much less mischievous than the other, when it is applied in the manner I have described. Where, on the contrary, there has been no such wasting of limb, it seems to me that faradisation has acted better, faradisation applied with wet sponges, and especially directed to the muscles. If the contractility of a muscle is good, and just in proportion as you find the contractility of a muscle good, your prognosis is bad, so far as electrical treatment is concerned. If you find, for instance, a limb perfectly paralysed, but contracting perfectly well to galvanism, or sometimes acting even in excess, you can do nothing more by applying galvanism to that limb. Your prognosis may, however, be good if you find the contractility diminished, but not lost. If it be wholly lost, the prognosis is bad; if absolutely good, the prognosis is bad; if between the two, it is in proportion to the improvement you can effect in the nutritive condition by one or two applications of the current.

I have to mention only one other point in these cases of spinal paralysis—cases of impotence. These cases are sometimes very much improved by the use of electricity applied in the same manner as for loss of power over the sphincter vesicæ.

9. Now a few words on paralysis from injury to or disease of the nerves—the third group. These cases are distinctly of the same class as those which Dr. Marshall Hall called "spinal paralysis." Some persons have called them peripheral, local, or traumatic paralysis. So far as the contractility of the muscles is primarily concerned, it matters not whether you cut the nerves across or destroy the cord to which those nerves were attached. If you divide a nerve going to a muscle—as, for example, when the facial nerve is divided by disease in the bone—you have "spinal paralysis" of the facial nerve in the sense in which Dr. Marshall Hall used that word. The severance of muscles from the spinal centre may be complete or incomplete, and you can measure the amount of damage done by the amount of electric contractility that remains. If a muscle or a group of muscles has been for a time completely paralysed by a damage done to a nerve or by neuritis, and yet the morbid state of the nerve was of such kind that it might be repaired, then, although the nerve has recovered, the results of its disuse may remain, and imperfect paralysis may persist. For instance, take this example, which occurred to myself not very long ago. A man tried to lift a heavy portmanteau, strained himself in doing so, had great pain in his arm afterwards, and then most intense, indeed ago-

nising, burning and tingling in the tips of his fingers and palm of the hand. After a time the pain disappeared, and then it was found that his hand was excessively weak and that the muscles were wasted. He had strained his forearm, injured its nerves, and set up some neuritis; but after the neuritis passed away there remained paralysis of the muscles, with wasting, and almost complete loss of electric irritability. It was not until some time after all these symptoms had occurred that he was treated electrically, and then the difficulty to be contended with was the wasted muscles. In looking at what he could do with his hand, we found that there was every movement of the hand that could be performed; he could bend all his fingers, separate them, and bring them together again; but he could not do this quickly, nor could he do it forcibly. There was partial paralysis of all the muscles of the hand, depending upon damage to the nerve, and also upon consecutive changes in the muscles. Electricity was applied to the forearm and hand, and the muscles soon improved in their nutrition; and with that improvement in the nutrition of the muscles the voluntary power returned. You may find a similar thing, now and then, in the case of facial palsy—paralysis persisting as the result of disease. Examined electrically, you find that there is a certain amount of contractility left, although it is defective. If you apply electricity after an interval of two or three weeks, you may often cure the case by a very few applications; but if the paralysis has lasted for six months, you will find at first very little contractility indeed, and you will have to apply electricity again and again before you obtain any distinct marks of improvement. Sometimes there is slight restoration of voluntary power after even the first or second application, and then the subsequent improvement is very trifling. When the paralysis is imperfect, and the contractility is only diminished, you may accomplish much; but when the contractility has quite disappeared there is little or nothing that you can do. You never can tell, until you have made several applications of the current, whether or not the case is curable, for although a group of muscles may be completely paralysed to the will, there may be some few nerve tubules that have escaped destruction, and their functions may be slowly recalled.

The mode in which you should apply electricity in cases of local paralysis is the following:—Place one conductor, well wetted, over the trunk of the nerve, and the other over the muscles, *sciatica*. If you are using faradisation, you may keep the second conductor steady; if galvanism, you must move it about, in order to interrupt the current.

Paralysis of the third nerve, with ptosis or strabismus, may be treated by galvanism or by faradism; in either case one pole should be placed behind the ear, in the hand, or on the cheek-bone, and the other should be applied to the lid. A weak current only should be used, and the application should be brief.

In paralysis of the seventh nerve, from simple exposure to cold, the best plan of using electricity is the electric brush. Place a well-wetted sponge behind the ear, and take the metallic brush, and brush it over the skin, so as to sting the face. If it have existed longer, and there be much wasting of muscle, the same rule applies; but here you should also operate upon the muscles; and I would advise you to use the battery current for a certain number of times, until you find that its power of eliciting contraction diminishes, and then to apply faradisation.

10. And now a word or two about other kinds of paralysis depending more or less on some morbid condition of blood, or nerve, or muscle, or of all these elements together. And, first, let me direct your attention to poisoning by lead.

(a) I do not know the precise mode in which lead produces paralysis, or why it singles out particular muscles; but in those muscles which are affected, it is found that there is undue readiness of response to a slowly interrupted galvanic current, and greatly diminished contractility to faradisation and to a rapidly interrupted galvanism. Whatever may be the explanation of these points, remember that it is not simply a question of difference in the kind of electricity applied; for, if you rapidly interrupt the battery current, you find the muscles in lead-palsy do not act to that. The rapidity of the interruption may account for the inaction of faradisation; but why the muscles that are paralysed should act more readily than healthy muscles to a slowly interrupted current has not yet been explained. The mode of treating lead-palsy has been by faradisation, or by the application of the battery current. You take a current from, say, five cells, apply it to the extensors of the hand, and you produce definite contraction. After a few applications you often find that five cells are not enough, you have to use seven or eight or ten; and in a few weeks of application you have to use quite as many to produce contraction as in a healthy limb. At first they are very sensitive to the battery current; then gradually, as you apply it, they grow less so, and you then, curiously enough, find them brought back into their normal relationship to faradisation. There is no doubt about the fact that the improvement in nutrition, which seems to be brought about by the battery current rather than by any other means, entails a loss of the morbid irritability to that battery current, and with that improvement in nutrition you get a return of the normal contractility. If you have not a battery current, you may use faradisation to begin with; but if you do, be quite sure that you affect the muscles. I have known patients with lead-palsy treated by having their hands in water and their feet in water while the current is passed from one to the other. Such a proceeding is not of the slightest good. If you were to apply one pole of a faradisation machine to the chimney-pot of a man's house, and the other to his door-step, you would be about as likely to get the current into the muscles that you want to benefit. You must apply faradisation locally, with thoroughly well-wetted sponges, and of such low intensity that it is scarcely felt, and yet of sufficient strength for you to be certain that the muscles respond. Use it every day, and have particular muscles singled out—just those which are the most paralysed. In these cases it is often difficult to get the current into the limb; and you will find an advantage sometimes in soaking the limb by covering it, for an hour or two beforehand, with wet lint and oiled silk at the spots where you want to apply the sponges. Get the skin well moistened, and the current will pass through more readily.

(b) One word about the paralyses that come from anæmia, and are often met with in pale hysterical girls. Some are set down as hysterical without, I think, any just cause; they are more or less dependent probably on an altered blood state, which may affect the cerebral centres, and lead to these peculiar weaknesses. I am quite sure that some of these local paralyses are relieved occasionally by static electricity administered in the mode I have described already, by sparks from the skin, or prime conductor, or by a Leyden phial. One of the forms which anæmic paralysis occasionally takes is that of loss of speech, or change of voice, dysphonia, or aphonia. It is often called hysterical aphonia. It may be hysterical, according to the use of the term by some people, but in many cases it exists quite alone and apart from anything that one ordinarily recognises as the hysterical temperament. When present there is almost invariably marked anæmia. Here sometimes a few sparks from the prime conductor of a machine will bring the voice back directly. Sometimes, if that will not do, the Leyden phial will immediately succeed, and this after you have applied electricity in other forms without success. A few sparks do not cause pain; but if you apply faradisation to the larynx, you do cause a great deal of pain. It is uncomfortable to have even a weak faradic current passed through the larynx, and it is often perfectly unsuccessful; and yet a spark, which causes no distress, will often bring back the voice at once. In certain cases it is desirable to introduce the current of faradisation right into the glottis; and this is so when there is distinct paralysis of the vocal cords. You may see with the laryngoscope that one or the other cord, or that both cords, are paralysed; and it is quite easy to apply faradisation to the larynx internally in the manner recommended by Dr. Morell Mackenzie. One pole is held in the hand, or applied to the nape of the neck; the larynx is well exposed; and the other pole is carried between the cords by an instrument constructed for this purpose. This is shaped like a catheter, with a small sponge at the end; and this sponge has a wire passing from it inside the catheter up into the handle, which is so connected with a key that you can either make or break the current by pressing on the key. Having placed the sponge in between the vocal cords, you touch the key and send the current through them. Patients will sometimes cry out the moment that the application is made, as you may very easily imagine that they would if they have any crying power left in them. But many patients prefer the internal faradisation of the

larynx to the external, affirming that it is the less painful of the two.

11. There are a few words only which I wish to say about local spasms. The forms of spasm in which electricity has been most commonly used are "torticollis," a spasmodic condition of the muscles of the neck on one side; "writer's cramp"; and so-called "histrionic spasm" of the face. It is said that such cases have been cured, but my own experience has been unfortunate with regard to them. I have tried electricity again and again, and in every available form, but have never seen it do any good. I have tried battery currents, direct and indirect; I have tried faradisation weak and faradisation strong, with wet sponges and with dry; I have used static electricity also, and each form of electricity persistently; I have not given up because the treatment has done no good at first; but I do not know one single instance in which it ever seemed to me to do the smallest good. In torticollis, for the time being, you can put the head straight by either a strong battery current passed through the contracting muscles, or by faradisation of the other side, the muscles of which are often weak; but directly you cease the application the head goes back again into its abnormal position. I have obtained similar negative results in cases of both writer's cramp and histrionic spasm. Others have been more successful, and I trust that your experience may resemble theirs rather than my own.

12. In painful affections, such as the neuralgiæ, migraine, sciatica, tic douloureux, and the like, and also in some conditions of modified sensibility, such as the spontaneous feeling of heat or cold, the sense of numbness, of tingling, "pins and needles," or such-like discomforts, electricity is often of considerable service. It is the continuous galvanic current which you should use, and it should be of only such strength as to be just perceptible by the patient; it should be applied to the part with well-wetted sponges, and should be applied for a short time only, but with frequent repetition. I know of nothing more distinct or more satisfactory in therapeutics than the relief which may often thus be given to suffering of the most intense character, the relief being very rapidly induced, and in many cases permanent. In applying galvanism to the head you must be very careful to avoid using such a strength as to cause vertigo or faintness, and I am sure that you may avoid these evils by trying the current upon your own head first, and then by carefully observing the patient, and stopping the application for a time the moment that there is any complaint, by word, gesture, or look, of any uneasiness in the head or epigastrium.

Electricity is one of the most powerful agents that you can employ in the treatment of disease; but it is useful, useless, or mischievous, according to the manner in which it is applied; and my endeavour has been to furnish you, by means of these lectures, with the information which shall enable you to derive help from it in diagnosis, and confer real advantage upon your patients by rightly directing its therapeutic powers.

ON

HYPODERMIC INJECTION OF QUINIA IN AGUE.

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IN April last my friend Mr. W. J. Hodgson, of Sutton St. Mary, had a conversation with me on the desirability of trying subcutaneous injection of quinia in the somewhat numerous cases of ague occurring in his district. We agreed that it was useless to operate with a salt requiring any other solvent than distilled water; and from Messrs. Bullock and Reynolds I procured a neutral sulphate of quinine which fulfilled this requirement. The results of several trials of this preparation were to be forwarded to me; and Mr. Hodgson has since kindly expressed a wish that I should make what use I please of his communication.

CASE 1.—The first case was that of a lad fifteen years of age, who had suffered from ague for nearly seven months, and was very much out of health. The tongue being loaded and the breath very foul, an emetic was given on the 23rd of April. Twenty minims of a solution of the neutral salt above named, containing two-thirds of a grain, were injected on the 24th, 25th, 27th, and on the 2nd, 3rd, and 6th of May. He was not cured, but got very much better by the last date, and Mr. Hodgson then lost sight of him.

CASE 2.—The patient was a man suffering from ague since the harvest of last year, and who had also been treated for severe lumbago during three or four months of the winter. Very little relief was obtained until the injection of quinia. The ague and rheumatic pain then seemed to leave him, as if by magic; and, whereas he could not formerly stoop to lace his boots, he soon was able to walk, several times in May, more than seven miles, to see his doctor.

CASE 3.—A woman, aged thirty-eight, of hæmorrhagic diathesis. Great difficulty was experienced in introducing the solution, as every puncture bled freely. At last a trial was made without loss of blood by punctures over the scapulæ. The remedy acted favourably, and all signs of ague disappeared. The dates and number of injections are not recorded.

CASE 4.—June 10th: A man, aged sixty-four, lying apparently very ill in bed in the hot stage of a bad attack of ague. The wife stated that he had it badly on the 6th and 8th. An emetic was given, and the next day (11th) thirty minims of the solution of neutral or soluble sulphate of quinine were injected. As the patient lived at some distance, the doctor could not call until the 13th. He found that the man had gone to work. A message was left, desiring him to come to the surgery in the evening. Thirty minims, containing one grain, were then injected into one arm, and twenty into the other. The next day the patient remained at home, feeling "knocked up"; but on the 7th July his wife reported that he had been hard at work every day since the 15th June, and was as well as ever she knew him.

CASE 5.—A well-grown girl, eighteen years of age, had tertian ague for seven weeks. The medicines given relieved her for six days; but on June 11th she was worse than ever. Thirty minims of the neutral quinine solution were injected into the arm, and it was to have been repeated on the 13th; but for some unavoidable reason it was postponed. On the 16th she looked as well as possible, and her mother said she had never worked better about the house.

CASE 6.—On June 26th a man who had suffered from tertian ague for six months or more was injected with thirty minims of the solution. It was repeated on the 28th and 30th, but the result was not satisfactory; at least the ague was only modified, not cured.

In looking over these cases, few in number, and briefly recorded, one prominent fact comes out which is of real practical importance. When a practitioner is located in an ague-engendering district, he finds that the bulk of his patients are not unlikely to suffer from a supplementary attack of *horripilatio* on the appearance of the bill at Christmas, which must be a heavy one if three or four members of a family have had to be supplied with mixtures containing sulphate of quinia during several months of the year. And here let me not be supposed to mean by the sulphate of quinia of the British Pharmacopœia, the salt supplied by Messrs. Bullock and Reynolds. The former requires ten minims of diluted sulphuric acid to form a perfect solution of ten grains in half an ounce of water, whilst the latter is soluble in distilled water, and its introduction by the syringe gives rise to no smarting or prolonged tenderness.

Case 5 is rather an astonishing one. The malady had proved obstinate, and the girl looked extremely ill in the intervals, and could do no work. Yet the injection of one grain of quinine seems to have produced a beneficial effect, which a long course of medicine administered internally could not accomplish. But it must not be supposed that the hypodermic treatment will supersede the exhibition of the various preparations of bark or arsenic; and perhaps the best conclusion to which one can come is that injection of quinia used early, and at the commencement of uncomplicated ague, is invaluable as a remedy; but that it will often fail when tried in long-established cases, where there is hepatic or splenic complication.

Grosvenor-street, W., Oct. 1870.

HYDATID TUMOURS:

TWO CASES ILLUSTRATING SOME OF THE DIFFICULTIES IN DIAGNOSIS.

BY H. T. WHITTELL, M.D.,

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CASE 1. *Movable Hydatid Tumour in the Abdominal Cavity.*—B. H——, aged eighteen, admitted to the hospital Nov. 3rd, 1869; ailing two years; general health good; complains of a "hard lump" in the abdomen, which, when first felt, was about the size of an egg, but has continued to grow until it is now about the size of a man's fist. On examination, a tumour is readily felt beneath the parietes at the upper boundary of the right iliac region; it is globular, smooth, and when grasped by the hand gives the impression of a hard fibrous growth. It is painless, and can be easily moved about in any direction. The exact diagnosis of the case was difficult, but it was agreed in consultation that it was not advisable to interfere by any operative proceedings. The boy was therefore dismissed from the hospital, but was requested to show himself about every two months, so that we might watch the progress of the case. He accordingly paid us two or three visits, but on these occasions there was no perceptible difference, except that the tumour continued to enlarge. The patient presented himself again on June 23rd. The tumour was then about double its size in November. It could still be floated about as before. The lower portion was hard and unyielding; but, on careful manipulation, we thought the upper portion softer and somewhat elastic. I had from the first suspected the tumour to be hydatid, although its hard, fibrous-like feel seemed to tell against the diagnosis. Now, however, that a portion gave the impression of elasticity, I determined on making an exploratory puncture. I therefore caused the tumour to be compressed between the palms of the hands of an assistant, so as to force it towards the parietes, and make the skin tense just over the point of exploration. I then plunged a fine exploratory trocar into the tumour, and drew off through the canula a fine stream of clear hydatid fluid. We obtained about half a pint of fluid, in which we detected large numbers of echinococci. On withdrawing the canula, we could find no trace of the tumour. The lad was sent to bed, and after four or five days he left the hospital, without having experienced the slightest inconvenience from the puncture.

Hydatids are much more frequently met with in South Australia than in England It is seldom that we have not cases under treatment in the hospital. The case just narrated presents some points of interest with respect to diagnosis. I have never before met with a tumour of this kind which could be so readily pushed about in different directions. In this respect it resembled a floating kidney to such a degree that, when the patient was shown at a meeting of the Medical Association soon after he first came under observation, some members thought we might have to deal with a movable kidney enlarged by disease. The hard, fibrous-like feel of the tumour was also peculiar and deceptive; so much so that I should now doubt whether I was not deceived in November through defective tactile sensibility, had it not been that all the gentlemen who saw the case agreed on this point.

The advantages and comparative safety of exploratory punctures in cases of supposed hydatids are well illustrated by the result in this case. This is a practice we commonly follow in the hospital. We never wait for adhesions, as insisted on by Trousseau and some writers of the English school, and, so far as I have known, the punctures have never been followed by bad results.

CASE 2. *Hydatid in the Brain.*—On the 21st of May last I was requested by Mr. Carey, who was assisting me during the absence of my partner in England, to examine with the ophthalmoscope one of our patients who had been under his care during the previous five or six weeks. The patient was an intelligent-looking girl, aged about thirteen and a half years. She had never been strong, and about Christmas last she began to complain of headache and "a feeling as if something was moving in her head." Sometimes she could not see distinctly; her gait was noticed at times to be unsteady; and she occasionally had fits of vomiting. Febrile symptoms succeeded; and in February she was placed under the care of the homœopaths, who pronounced the case to be one of gastric fever. The child gradually became worse until April 9th, when Mr. Carey took charge of her.

The following is from his notes of the case:—"She complained of great headache, and vomiting. The bowels were constipated; pulse 100, quick and compressible; temperature 102°; right eye blind, pupil widely dilated. In the left eye vision was imperfect, and the pupil larger than natural. She was ordered mustard foot-baths, cold lotions to the shaven scalp, a turpentine-and-oil enema, and two grains of oxalate of cerium every three hours. On the following day, the bowels having been freely opened, the head was relieved, and the vomiting had ceased. She had had slight convulsions, and the left arm and leg were found to be slightly paralysed.

"On April 11th the left eye had become blind, and the paralysis was more marked. From this time she was treated with blisters to scalp, iodide of potash, and chinchona. She improved for a time, and some power returned to the arm and leg. She could sit up, and on one occasion she walked a little."

A few days after this Mr. Carey asked me to examine her. I found her thin and pale, but free from all febrile symptoms. The left limbs were paralysed, but her consciousness and intelligence were perfect. She was able to sit up while we used the ophthalmoscope. Both eyes had lost all perception of light. The optic disc of the right eye had reached the stage of white atrophy; that of the left had the well-marked "woolly" appearance of optic neuritis, the margin of the disc was irregular, and a little below the disc were two or three white patches, not unlike what is sometimes met with in albuminuria; but on examination of the urine it was found free from albumen. My diagnosis was that the blindness was caused by intracranial disease, and that there probably existed a morbid growth on the right side of the brain. An hydatid cyst was mentioned, as well as syphilitic or tubercular deposite, as being sufficient to account for all the symptoms of the case.

At the latter end of May the child became worse; the headache, vomiting, and convulsions returned, and the patient died on June 11th. She retained her consciousness to the last. We were permitted to examine the brain on the following day. The cranium was very thin; the membranes of the brain thickened and vascular. On removing the dura mater there was seen peeping through the cortical substance of the upper part of the right cerebrum, to the extent of about half an inch square, a translucent membrane, through which fluid could be detected. We carefully punctured the membrane, and drew off about ten ounces of limpid fluid, in which the microscope revealed large numbers of echinococci. On cutting through the membrane we found a cyst about the size of a small orange. We were able to draw away the lining membrane entire, and on examination we found it studded with beautiful specimens of echinococci in various stages of development. The white substance of the right hemisphere had given place almost entirely to the hydatid cyst; the ventricles contained a small quantity of fluid. All the other parts of the brain were healthy. To the naked eye the optic nerves presented nothing abnormal.

Cases of hydatid tumours in the brain are few and far between. The one just narrated is reported on account of the early history and course being sufficiently complete to be of use in the diagnosis of similar cases. The student of cerebral pathology will also find points of interest in the connexion of symptoms with the well-defined lesion of tissue found after death.

While I have the pen in hand I wish to call the attention of microscopists to a peculiar appearance which, so far as I can ascertain in this part of the world, has not yet been noticed by observers in Europe. While examining the fluid from Case 1, about four hours after its removal from the body, I found several of the echinococci, with head and rostellum protruding, and still retaining vitality. Several groups were seen, each individual being attached to a portion of the germinal membrane by its funiculus. The contractile vermicular-like movements of these groups interested me, and while watching them I observed a rapid

movement just at the point of junction of the funiculus with the germinal membrane. At first I thought this was a movement of nutrient fluids from the membrane to the echinococcus; it had very much the appearance, under a low power, of the transmission of fluids as seen in some plants. On further observation with higher powers and careful illumination, I arrived at the conclusion that the motion was caused by the rapid vibratile action of cilia-like processes attached to the hydatid at the point indicated. As the parasites became weak and died, the motion ceased, and I have not had an opportunity of repeating my observation. With Beck and Beck's $\frac{1}{10}$ in. objective I obtained a fine view of the movements, but they were also distinct under the $\frac{1}{5}$ in. and $\frac{1}{3}$ in. glasses.

July, 1870.

REMARKS ON VERSION:

WITH A CASE IN WHICH THE PRESENTING ARM WAS WRENCHED OFF IN THE ENDEAVOUR TO DELIVER.

BY ALEX. MILNE, M.D., L.R.C.P. & S. ED.

IT is not very easy to say to whom, amongst obstetricians, the highest pæan ought to be awarded—whether to Paré, who taught the value of version; to Chamberlen, who gave us the forceps; to Desgranges, who rescued ergot from the women; or to Simpson, who introduced chloroform. For my own part, I rate Paré's work very highly, because I have found turning of incalculable value in the course of my practice, the most encouraging results being achieved by it. The forceps is, doubtless, one of the most invaluable instruments that was ever invented in connexion with our art; but, apart from its greater risks, as compared with version—that is, in high operations,—the unchallengeable fact remains that the hand, soft as the woman's parts themselves, will often succeed when the instrument utterly fails, and where the only other alternative is the sad one of craniotomy, which is of course, as regards the child, convertible with death. Of more than fifty cases of version in which I have been called to operate, in my own practice and in that of my brethren, six of them were of this nature—that is to say, the forceps were tried by dextrous hands, unsuccessfully, before the turning, which was successful, was resorted to. One of these cases, in which neither Professor Simpson nor myself could get the forceps applied, but in which I succeeded in turning, I reported in the *Edinburgh Medical Journal* for March, 1867.

Although version is the common proceeding in transverse presentations, in most cases of placenta prævia, in convulsions, flooding, &c., I believe it is not very generally resorted to in contraction of the pelvic brim. I may state that I am one of those who believe that it might be oftener adopted in such cases—that the bi-parietal diameter should be replaced by the narrower bi-mastoid,—in preference to the more critical high forceps operation. I have much confidence in version in such instances—a confidence inspired by almost unvarying success. In reporting one of the more recent cases of difficult version which have come in my way, perhaps I may be allowed to state one or two points which are, in my opinion, conducive to success in this operation.

Turning, I need hardly observe, is, in ordinary instances, as simple as the application of the short forceps; but where the liquor amnii has been long drained away, and the parts have become tumefied and dry; where the uterus is in a state of extreme tonic spasm, and grasps the fœtus as in a vice, the case has deepened into one of considerable difficulty and danger. The operation may then even have become utterly impracticable, impelling to the unhappy alternative of perforation. The first thing to be done in such a case is, of course, to overcome the spasm. This should be most thoroughly done, otherwise we may be effectually baffled. For this purpose resort was wont to be had to bleeding, to tobacco, or to opium; *now* we have the more efficient drug, chloroform. This I ply the patient with, on to most complete anæsthesia (I mean in such difficult cases), and thus, as a rule, the tetanic uterus relaxes, and entrance is permitted. I have seen one or two singular cases, where the chloroform failed to overcome the spasm; but these do not happen often. In such circumstances much help was obtained from tartarated antimony.* I repeat, to succeed, not to be baffled in these extreme instances, overcome the spasm in the most complete manner possible.

As regards the method of operating, I place the patient in the ordinary British left lateral position, with the nates brought a little beyond the edge of the bed, the knees well drawn towards the abdomen, the right one being well elevated. There is much difference among obstetric authors in reference to the most suitable hand to employ. Dr. Robert Lee, a most experienced author, recommends the right; the late Dr. Ramsbotham strongly urged the left; Sir James Simpson rather preferred the right; and Dr. Tyler Smith and Churchill also favour the use of this hand. As regards myself, I strongly recommend the left hand; and I may observe that I was in the habit of employing it before I noticed (which I did with much satisfaction) Dr. Ramsbotham's cogent reasons for preferring it to the right. The left has the following advantages:—1. It is usually rather smaller than the right (in my own case it is markedly so). The value of this is obvious. 2. The canal to be traversed is backwards, upwards, and somewhat forwards, and the left hand (and forearm) adapts itself to that curve much more easily than that of the right; that is, with the woman lying in the ordinary obstetric position. You cannot adapt the right hand and arm so well without bending the wrist backwards in an unnatural and uneasy degree. 3. The knuckles of the right hand hitch against the pubes, whereas in the case of the left they are received into the cavity of the sacrum. Lastly. In employing the left hand, the right is free to render important aid externally, either in the way of helping up the head or bearing down the breech. The influence of external manipulation is often very great. Dr. Braxton Hicks's method—the combined external and internal plan—has superior advantages in some cases, such as in placenta prævia and convulsions, and I have reported† a few such where its value was undoubted; but where the uterus is in the tensely spasmodic state, and invests the contained body almost as closely as the egg is covered by its shell, it is utterly impracticable. But I have another plan of my own which I frequently adopt, and which might be termed the combined internal method. It is this: with three or four fingers you grasp a foot, or the knee, and make traction downwards, while simultaneously, with the index-finger and thumb of the same hand, you push the presenting part, whether shoulder or head, upwards. A more speedy revolution of the fœtus is thus often accomplished.

I now subjoin a brief report of the case referred to at the head of this paper.

On the 20th May last Dr. Groves of Trinity requested me to see a woman in labour there, who had fallen under his care on being abandoned by another practitioner after an ineffectual attempt at delivery. It was a case of twins, and the first child, presenting naturally, was delivered without trouble. The second was an arm presentation (dorso-anterior); and the person in attendance, after employing a great deal of force, wrenched the presenting arm completely away. Whether he made any attempt to turn or not previous to the exertion of so much misapplied force is not known, for he remained out of the way after his disastrous failure. Dr. Groves was called after this, and arrived about four hours after the arm was severed. He found the parts so terribly swollen and bruised, and the uterus in such a state of spasm, and encircling the fœtus so firmly and closely, that it was impossible to reach a foot. On my arrival, about twelve hours after the tearing away of the arm, I found the state of matters to be as follows:—Patient pale and exhausted; pulse rapid and feeble. On making a vaginal examination, I found the parts swollen and lacerated, hot, and besmeared with a dark discharge; the glenoid cavity, with a few ragged shreds of muscle surrounding it, presenting a little below the brim. Dr. Groves placed the patient deeply under the influence of chloroform, and I began inserting my left hand with the view of arriving at a foot. This was a laborious task, the hand having so little room to act, and being so firmly compressed between the

* I have referred to this potent antispasmodic power of antimony, where chloroform failed, in my Manual of Materia Medica.

† Edinburgh Medical Journal, Nov. 1869.

uterus and the child. I had two or three times to stop my cautious efforts, in order to rest the arm; and more than once thought that I should have had to desist from the attempt to turn. In the course of twenty minutes or so, however, I was able to seize hold of a foot, and very shortly afterwards delivery was effected. The child, I need scarcely add, was dead. The woman succumbed after a few days, from sloughing of the vagina and exhaustion, undoubtedly due to the rough treatment she had experienced before the arrival of either Dr. Groves or myself. It is the first maternal death I have had after the operation of turning, and I think I may warrantably flatter myself that in this case the version was not the cause of it.

Edinburgh, Sept. 1870.

REPORT OF

TWO OPERATIONS PERFORMED UNDER THE INFLUENCE OF NITROUS OXIDE GAS.

BY W. HASLAM DAVIS, M.R.C.S.

THE inconvenience arising from the long time needed to produce anæsthesia by chloroform, and the sickness following its use, cause surgeons frequently to perform brief yet painful operations without it. For these reasons I have usually operated for fistula, and amputated fingers, without chloroform. But, having a nervous patient who required the operation for fistula in ano, and could not "screw his courage to the sticking point," I determined to try the effect of nitrous oxide gas. Mr. Crapper, a dentist of this town, who makes, and uses extensively, the gas, gave me several opportunities of seeing it used; and by these I was convinced of the practicability of producing by it insensibility to pain, for a short time, with safety. Mr. Crapper kindly administered the gas, and in two minutes from the application of the inhaler the patient awoke, unconscious that he had been cut, and with his wound dressed.

Shortly after this, I found it needful to amputate a middle finger for necrosis of several months' standing, and again obtained the assistance of Mr. Crapper. In this instance, one inhalation sufficed for the removal of the finger and the head of the metacarpal bone, which proved to be diseased; and after a short interval, during which the hæmorrhage was controlled by the use of cold water, the gas was again given while the wound was stitched up. On recovering his consciousness, the patient said he felt quite well, but wished his finger were off. He had not felt the operation at all. I must state that there was a good deal of muscular spasm, so much as to render it necessary to have the hand firmly held.

In each case there was an absence of sickness after the administration, and the digestion was not disordered.

I think that for the minor operations, and those which can with certainty be done quickly, nitrous oxide gas is much to be preferred to chloroform; but in operations like herniotomy, where it is most desirable to have muscular relaxation and perfect stillness, I should continue to use chloroform.

Hanley, Staffordshire, July, 1870.

OBJECTIVE TINNITUS AURIUM.—Dr. Politzer brought before the Medical Society of Vienna on June 10th, 1870, a young girl from whose left ear a rhythmical ticking can be heard. This is perceived even when the girl is asleep, and had been lasting for the last five months. This sound must not be confounded with the ordinary subjective tinnitus aurium, nor with the noise which some people can emit by contraction of the tensor tympani. The patient cannot stop the ticking, nor produce it when a pause has taken place. The sound, however, is no longer heard when the girl pronounces the German vowels *a* or *e*, nor when the velum is pressed upwards. Dr. Politzer believes that the ticking is caused by the tensor palati mollis pulling from the Eustachian tube to the velum, by drawing the mucous portion of the tube from the cartilaginous part. Dr. Gruber doubted this explanation, and would refer the ticking to the action of the tensor tympani.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. MARY'S HOSPITAL.

NOTES OF A CLINICAL LECTURE ON CASES OF LUNG INFLAMMATION TREATED BY OPIUM.

By Dr. HANDFIELD JONES.

E. W——, aged twenty-five, a servant, was admitted on the 5th January last, having been ill for two days. She complained of great pain in the left side and some cough. The pain was aggravated by inspiration, and there was hardly any movement of the ribs on that side. There was dulness at the lower part of the left back, and good breathing in the upper part and in all the right back. The tongue was furred and brown; the pulse 120, small, and weak; the temperature 104°. Her first symptom had been cough and heaviness; the day following she had felt very cold, and on admission her head was very giddy when she sat up. She was ordered four leeches to the left side and a poultice, and two grains of iodide of potassium in an ounce of citrate of potash mixture, and a grain of opium, three times a day. Two days later, the lower half of the left back was very dull, and presented on auscultation marked bronchial breathing, with bronchial voice and weak crepitation; the pulse was 96; the expectoration very scanty, of marked yellow colour; the skin warm, the tongue dryish near the tip, and the temperature 104·36°. On the fourth day the pulse was 100 and good, the temperature 97·16°, and the tongue more moist. On the fifth day the pulse was 88, the temperature 99·7°, and the expectoration mucous and scanty; at the left lower back, bronchial breathing alone was heard during quiet respiration, but crepitation as well on deep inspiration; tongue moist and clean; there was still some pain in the left side on taking a deep breath. Her medicine was changed to fifteen drops of the solution of perchloride of iron in an ounce of the hospital quinine mixture; and on the seventh day after admission the pulse was 96, the temperature 98·6°, good breathing was heard at the left base and back, and convalescence was well established.

This was a well-marked case of pleuro-pneumonia, though not a severe one. It came early under treatment—namely, on the third day of the illness,—and defervescence was fully established on the fifth day. It is too much to affirm that the brevity of the attack was the result of the treatment, especially as the fall in temperature was so sudden, more than 7° Fahr. in four-and-twenty hours. Nevertheless, as the opium, at any rate, was no placebo, as it evidently did not retard recovery, and as it is known to be useful in other inflammations, we shall probably not be far from the truth if we believe that it promoted the cessation of the morbid process.

Another case was that of G. H——, aged twenty-seven, a porter. He was admitted on the 16th of April. He had been recently laid up with rheumatic fever for six weeks. Three days before admission he was taken with pains at the front of the chest; and the day before he had vomited, according to his account, a good deal of blood. He had often had pain after eating, and had been much troubled with flatulence. No enlargement of the liver or spleen was found; the epigastrium was tender; the tongue moist and rather coated; the bowels were open; the urine was red and rather thick; the pulse 108 and weak; the face pale. He said he felt very weak, and had had the day before very severe pain at the lower left side, about the seventh and eighth costal cartilages. The pain was then especially precordial, and increased by inspiration. The left front was resonant, and breathing was heard down to the third

space. The heart-sounds appeared normal, but rather weak. There were sounds about the base, or rather between it and the apex, which were partly of cardiac, partly of respiratory, rhythm—one of a creaking or grating character. The precordial dulness was not notably increased. Good resonance and breathing were found on both sides of the back. When he turned on his right side he experienced a temporary feeling of suffocation. He was ordered beef-tea and milk, a blister to the epigastrium, and half a grain of opium four times a day. On the following day he felt some relief; but on the second day after admission there was more pain at the precordia, increased on percussion, and pain on coughing at the lower left back, with bronchial breathing and voice. The heart-sounds were normal; the pulse was 110, small and weak; the temperature 102·2°. He was ordered four ounces of brandy, and a blister to the precordial region; which was followed by considerable relief on the third day. On the fourth day after admission there was no pain at the precordia, or in any part of the chest on inspiration; the dulness, bronchial breathing, and bronchial voice were well marked in the left lower back; the appetite was improving; the temperature 100·4°. On the seventh day he felt much better, and was quite free from pain; and the resonance and breathing at the left base had become tolerably natural. On the eleventh day, the breathing being quite good at both bases, and the patient feeling well, the opium was discontinued, and twenty grains of the saccharated carbonate of iron given three times a day instead. On the fourteenth day he was discharged quite well and strong.

This man had undoubtedly a moderately severe pleuro-pneumonia of the left side, which may be considered to have commenced on April 13th, and to have terminated ten days later, and seven after admission. The inflammation seems to have affected the pleura first, and that rather extensively. The precordial pain, I believe, had really its seat in the pleura which overlaps the heart, and the sounds which were heard were not, I think, indicative of pericarditis, but of a roughened state of pleura. When this serous membrane is thus altered at a part where it adjoins the heart, it is very possible to have a friction-sound produced which is synchronous with the movements of the heart; and if at the same time the respiratory movements are very much checked, the friction may be mainly of cardiac rhythm. It is always, I think, much weaker than the friction-sound of well-developed pericarditis. The patient's testimony was very decided as to the good effects of the blisters, of which he had, I believe, three. The inflammation terminated speedily, and the exudation was rapidly resorbed. If the opium did not promote this result, at least it produced no perceptible ill effect, and most probably calmed pain and lessened the general distress.

The third case is that of F. Q——, aged one year, who was attacked with broncho-pneumonia of both lungs on February 26th. I saw him in consultation with Dr. Palmer the next day, and we agreed to give ipecacuan, salines, and opium in sufficient quantity to produce some narcotic effect. On March 5th Dr. Palmer reported that the child had distinct tubular breathing in the lower right back, with râle redux at the base of both lungs. Nevertheless he was at my visit sitting up in his mother's lap, and playing with his toys, a very rare sight indeed with such a state of lungs. He is taking half a minim of sedative solution of opium every two or three hours, with ipecacuanha wine and citrate of potash. He was not very sleepy, and had scarcely any fever. The consolidation, which was not extensive, was slow to disappear, but the child became convalescent by March 19th. Opium was recommended in this case because the child was very fretful and distressed, and bearing its disease badly. By lessening the excitability of the sensorium, the wear and tear of nerve-power was diminished, and exhaustion, *pro tanto*, avoided. Though a degree of narcosis was maintained, the respiratory function was not depressed, and the morbid action in the lungs does not seem to have increased. Such cases at this age are very perilous, and I much doubt whether this child would have done so well without the opium.

I might allude, further, to cases of ataxic pneumonia, where the patient suffers with delirium, sleeplessness, and restlessness, and often very hurried breathing, but without orthopnœa or lividity. Here, of course, opium, or some analogous remedy, is urgently needed.

The considerations which lead me to look hopefully to opium as a principal remedy in the treatment of many cases of inflammation are: (1) that it seems to act as a conservator of nerve-force when the latter is depressed, as it so commonly is in the prevalent summer and winter catarrhal disorders; (2) that it astringes dilated and relaxed vessels, the smaller arteries and capillaries, and so lessens hyperæmia and exudation; (3) that it renders the sensorium less impressible, and so saves the system from the exhaustion caused by pain and uneasiness. To produce favourable effects, it should be given usually in medium doses, adjusted to the peculiarities of the system. Sometimes it may be combined with tonics or stimulants, sometimes with salines or alkalies, according to the practitioner's estimate of the quality of the morbid action. A good cholagogue aperient should always be premised, unless it be plainly unnecessary. It seems but reasonable that the drug which is so useful in peritonitis should render similar service in inflammations of other tissues. An hypothetical objection to the use of opium in cases of miasmatic inflammatory disease may be raised by those who imagine that the correct treatment is to eliminate the poison. If I thought their intention possible, I should agree with them that it was the main indication, and not to be interfered with. But, as I cannot think that experience teaches us to try to eliminate poisons, but rather to counterwork them, the objection seems to me to possess but little weight. At the same time I admit that I should be cautious in the administration of opium if the renal secretion were very scanty, and still more so if the colour of the lips betrayed a like state of the respiratory organs. You will observe that the induction of sleep scarcely forms any part of my intention in giving opium. Great as its value may be as a nightly hypnotic in some instances, I do not now advocate its use on that ground, but as a general sustainer of the vital powers.

ST. BARTHOLOMEW'S HOSPITAL.

CASES UNDER THE CARE OF MR. PAGET; CLINICAL REMARKS.

A Case of Warty Cancer of the Cheek.—Mr. Paget consulted his colleagues as to the advisability of interfering with this growth, which extended forwards from the posterior boundary of the cheek, near the anterior pillar of the fauces, nearly to the angle of the mouth; its indurated base involved all the tissues of the cheek except the skin, the adjacent gum of the lower jaw, and apparently also the maxilla itself. The objections to interference appeared to be, the danger of profuse hæmorrhage during the operation, the difficulty of completely extirpating the cancer, and the danger of rapid recurrence. The first two Mr. Paget thought were not insurmountable, and with regard to the third said that this form of cancer was less certain to recur than any other. Being supported by the majority of his colleagues, he decided to divide the cheek by an incision carried backwards through the growth from the angle of the mouth to facilitate the exposure of its inner surface, from either flap to remove as much as possible of the diseased tissue with the knife, and to complete its extirpation, especially about the gum and inferior maxilla, with caustic or the actual cautery.

Primary Syphilitic Ulcer of the Tongue.—This ulcer, situated on the edge and a little to the side of the tip of the tongue, presented a perfectly flat, oval surface, with a long diameter of three-quarters of an inch, much as if a piece had been snipped off. Its surface was of a yellowish-grey colour, and its base was indurated. Mr. Paget said that its flat, oval surface, and the induration of the base, distinguished it from any secondary or tertiary affection of the tongue. Though it had existed for ten days, there was no induration of the neighbouring lymphatics, but he expected that this confirmatory symptom would shortly be developed.

Lupus of the Rectum.—The subject of this affection was a middle-aged woman. On the posterior surface of the rectum it extended to a distance of no more than one-third of an inch, on either side, to about half an inch, and anteriorly about three inches upwards. In this direction all the tissues, short of the mucous membrane and submucous tissue of the vagina, were completely eaten away. The ulcer presented

an irregular but sharply defined outline, beyond which the tissues were perfectly healthy. Mr. Paget said that this disease corresponded exactly to the *Esthiomène* described by Huguier as invading the labia. It occurred generally in a tuberculous constitution, and presented marked points of difference from syphilitic affections of the rectum. In the latter there were almost always found flattened, œdematous, or coxcomb outgrowths, accompanied by thickening of the submucous tissue, often extending some inches up the rectum, and producing stricture; not, as far as he knew, ever destroying the sphincter, but, by infiltration among its fibres, sometimes producing paralysis. In this affection, on the other hand, there were no outgrowths, there was no thickening of the submucous or infiltration of adjacent tissue, but complete destruction as far as the disease extended, with a boundary of healthy tissue. The sphincter was not impeded by infiltration, but completely destroyed in the anterior wall of the rectum. Short of cancer of the rectum, Mr. Paget said it was the most frightful disease which could affect the part.

The patient having been placed under chloroform, the diseased surface was freely painted with concentrated nitric acid. During this process the patient made an expulsive effort, which resulted in the prolapse of about three inches of the rectum, exposing to view the tissues surrounding the ulcer, and confirming Mr. Paget's observation as to their healthiness.

Cartilaginous Tumour of the Radius.—This tumour, situated on the radial side of the wrist of a woman forty years of age, was of five years' growth. It was attached by a broad base at a right angle to the outer aspect of the carpal end of the radius. It was about the size of an orange, and covered with smooth, bluish-red skin, which presented two or three ulcerated openings at the upper part of the tumour. The ulna had remained unaffected, and the movement of the wrist-joint was not interfered with. Under these circumstances, Mr. Paget said he should not amputate, but endeavour to remove the growth by excavating the radius. The operation was performed on the following Saturday, Oct. 8th.

CASES UNDER THE CARE OF MR. SAVORY; CLINICAL REMARKS.

Acute Periostitis in Children.—With reference to a boy who was recovering from acute periostitis of the tibia, Mr. Savory said that it was noteworthy that, though children possess a power of repair much more active than adults, they recover much less speedily and completely from the effects of periostitis. This was to be explained by the fact that in them the inflammation is so acute that the periosteum is rapidly destroyed or disorganised into shreds, while in adults a slower process generally allows it to become detached complete, and often leaves it in an almost unimpaired condition, so that it can speedily and symmetrically replace the bone destroyed. This difference, he said, could easily be demonstrated by a comparison of specimens from young and adult subjects in any museum.

Rupture of the Urethra in a Boy.—Mr. Savory said that the patient had received a blow in the perineum, which had ruptured the urethra externally. He had made an incision to facilitate the discharge of sloughs; and a month later, when these had all come away, and not before, he had passed a catheter, first into the outer end of the divided urethra, and then, with a probe introduced into it as a guide, into the vesical end, and thence into the bladder. Fortunately the boy had been able to retain the instrument for forty-eight hours, and ever since its removal he had passed an increasing proportion of his urine through the urethral passage. Mr. Savory entertained hopes that the wound would close entirely, and the cure eventually be complete; and added that it was not in these cases desirable to introduce a catheter at the outset, and attempt to retain it there, because, as Sir Henry Thompson insists, the urine always finds its way between the urethra and the instrument, which therefore answers no good purpose, and may do harm.

The Diagnosis of Fracture of the Base of the Skull.—With reference to a patient who had been admitted with bleeding from the ear following a blow on the head, Mr. Savory warned his class against the idea that this symptom necessarily indicates fracture of the base; in numerous cases where bleeding from the ear and nose had followed injuries to the head it had been proved that no fracture had occurred. A discharge of blood followed by serum was, however, almost pathonomonic of that injury, and he was inclined to believe that the continuance of restlessness after from twenty-four to forty-eight hours after the injury was also. He recommended a perusal of Mr. Prescott Hewett's article on this subject in "Holmes's System of Surgery."

Among other cases, Mr. Savory also pointed out a very successful case of skin-grafting, and a rather curious case of a man in whom the buttocks had been split apart to a depth of about an inch immediately above the anus by a fall from a hayrick.

GUY'S HOSPITAL.

HYPERTROPHIC ELONGATION OF THE CERVIX UTERI; REMOVAL BY THE GALVANIC ÉCRASEUR.

(Under the care of Dr. PHILLIPS.)

THIS case is a good example of *allongement* of the cervix uteri as distinguished from prolapse of the uterus, so elaborately described by Huguier; and illustrates the advantage derived from the removal of a portion of the cervix in recent cases, as well as the ease and safety with which the operation is performed by the galvanic wire.

Catherine G——, a widow, aged thirty-five, was admitted into the hospital on the 25th of June. She stated that she was the mother of three children, the youngest of whom was born seven years ago. Her labours had not been attended with any unusual difficulty, and her health had always been good until about eighteen months ago. She then began to suffer much from bearing-down pains, and six months later first noticed a projection from the vulva. This appeared whenever she stood, and at the end of three months she was obliged to give up her occupation, in which she had been engaged for four years. This consisted in lifting heavy weights by the river side. The catamenia were regular and profuse. Various kinds of pessaries had been tried, but without any benefit.

On examination the case was found to be one of hypertrophy and elongation of the vaginal portion of the cervix. This projected from the vagina, and entirely prevented the patient from earning her livelihood. There was no cystocele or rectocele. It was determined to keep the cervix within the vagina by rest in the horizontal posture, and by a perineal pad. At the end of three weeks the cervix was diminished in size, but it then measured six inches and a half in circumference at its lowest part. The uterine cavity was four inches and a half long. The elongation was confined to the intra-vaginal portion.

Dr. Phillips removed rather more than an inch of the cervix by means of Middledorpf's galvanic écraseur. A platinum wire having been passed around it, fixed to the écraseur, and screwed home, was then connected with the battery, and the entire thickness of the cervix was soon removed by carefully screwing the instrument. No blood was lost. The cervix was held outside during its removal, as it was found that this could be done without endangering the bladder in front, or the pouch of the peritoneum posteriorly.

The patient suffered no inconvenience subsequently, except a rather severe hæmorrhage at the following menstrual period. Later on, however, it was noticed that, after exertion, there was a tendency to prolapse of the uterus itself. A small Hodge's pessary was then introduced, and from that time she felt no discomfort. When last seen, the uterus measured three inches in length. There was no tendency to any contraction of the cervical canal.

SOLVENT FOR THE EAR-WAX.—Dr. Pétrequin, of Lyons, has published, in the *Bulletin de Théap.*, an account of a series of experiments to find the best solvent for ear-wax. He tried successively olive oil, glycerine and oil, alcohol and olive oil, the latter mixed with oil of turpentine, ether, alkaline solutions, soap and water, chloroform, sulphuret of carbon, &c. Some were found ineffectual, and others were irritating to the aural mucous membrane. At last the author discovered that tepid water had the desired effect.

Reviews and Notices of Books.

Lectures on Clinical Medicine. Delivered at the Hôtel Dieu, Paris. By A. TROUSSEAU, late Professor of Clinical Medicine in the Faculty of Medicine, Paris; Physician to the Hôtel Dieu; Member of the Imperial Academy of Paris; Ex-Representative of the People in the National Assembly, &c. Vol. III. Translated from the Edition of 1868 (being the Third, revised and enlarged Edition), by JOHN ROSE CORMACK, M.D. Edin., F.R.S.E. The New Sydenham Society. London: 1870.

THE lectures in this volume are on the following subjects:—The Specific Element in Disease; Contagion; Ozæna; Stridulous Laryngitis, or False Croup; Œdema of the Larynx; Aphonia; Cauterisation of the Larynx; Dilatation of the Bronchi, or Bronchorrhœa; Hæmoptysis; Pulmonary Phthisis; Gangrene of the Lung; Pleurisy—Paracentesis of the Chest; Hydatids of the Lung; Pulmonary Abscesses and Peripneumonic Vomicæ; Treatment of Pneumonia; Treatment of Pneumonia complicated with Delirium, by preparations of Musk; Pneumonia of the Summit; Paracentesis of the Pericardium; Organic Affections of the Heart; Alcoholism; Spermatorrhœa; Nocturnal Incontinence of Urine; Glucosuria; Polydipsia; Vertigo a Stomacho læso.

The above enumeration is the best illustration we can give of the value of this book to the profession. There are a few errors and carelessnesses in the translation; but they are as nothing when compared with the debt under which we are laid to the New Sydenham Society and the translator for this rich contribution to our medical literature.

We will not attempt any detailed criticism of this volume. Trousseau is an author to be read, rather than to be reviewed. He can only be criticised worthily at the bedside. We will merely specify one subject, in the hope of directing special attention to it: that of Pleurisy.

Pleurisy was a favourite subject of Trousseau's, and he devotes several lectures to its elucidation, which appear in this volume, the perusal of which will greatly enlarge the reader's notions both of the disease and the author. There are two points conspicuously brought out in these lectures on pleurisy. One is a refutation of a common notion, resting principally on the authority of Louis, that acute pleurisy is never, by itself, a fatal disease. Trousseau gives sundry cases which show the importance of reconsidering, and, in fact, of abandoning this notion; although still it must be admitted that acute pleurisy is not commonly a fatal disease. The second point is that Trousseau established by his own frequent practice the utility of paracentesis—sometimes for the purpose of saving the patient with acute pleurisy from immediate death by asphyxia, and in more chronic cases from death by irritative fever and exhaustion. We have said that pleurisy was a favourite subject of Trousseau's. It was so mainly because he pointed out, and by his own practice illustrated, the value of paracentesis; so that he greatly contributed to the better treatment of the disease; and his lectures must be considered amongst the most valuable guides to a right appreciation of this operation and of the indications for its performance.

Trousseau was no specialist. He was a surgeon as well as a physician. He could perform tracheotomy or paracentesis of the chest without waiting for the arrival of the surgeon. Not only so, but less ready physicians sent for Trousseau to operate. On one occasion he tells us Chomel sent for him to perform paracentesis. What would our College of Physicians or Surgeons think of such irregularities as these? It is well at this moment to make a note of this circumstance, and to accept the rebuke to ourselves which it implies for our sharp line of demarcation between physicians and surgeons, and the partial education and examinations by which our medical system has been characterised. Poor Trousseau had to bear the fate of all useful discoverers. Ill-natured insinuations were made. "When I brought forward cases of children cured by tracheotomy, I was told they never had croup; that only those children had had croup whom I failed to save. I was even calumniated. According to my custom, I made no reply. Paracentesis of the chest was not met by the same objections, but nevertheless encountered many opponents."

We commend this great physician's works to the study of every reader.

OUR LIBRARY TABLE.

The British and Foreign Medico-Chirurgical Review, and Quarterly Journal of Practical Medicine and Surgery. No. 92. October, 1870. London: Churchill.—The large number of weekly and monthly publications on medical, surgical, and scientific subjects, tends to increase immensely the difficulties of conducting quarterly journals of the same character. The quantity of books published has considerably increased of late years, although we can scarcely say the same of their quality. Readers find it more than ever necessary to fall back upon short and early notices of them. Real, downright criticism, like that which we once had, is dying out. It requires the command of leisure, considerable powers of analysis, and the exercise of no little painstaking on the part of a reviewer, to write a searching critique; and the quarterlies must always possess advantages in these respects over publications issued more frequently. Writers in the former are enabled to group together various works published on the same or similar subjects; and they have the time to analyse, arrange, and master their materials, so as to afford a *résumé* of its literature. The present number of the *British and Foreign* is above the average; but then we are bound to say that the average has not, of late, been of that high standard that it once was. The first paper is on Sanitary Organisation in England. The second is a discriminating criticism of Professor Le Gros Clark's lectures on Surgical Diagnosis. The next considers Mr. Gardiner Hill's work on Non-restraint. We have already had our say about this book, and we have given its author all the credit he deserves. The review is somewhat severe, but we are compelled to admit that it is not altogether unjust. Dr. Broadbent's contribution on the Physiology of Respiration is good; it bears the marks of having been written by a man who has taken pains to work up his subject well. The article on Diseases of Children is also good, in that it brings together and compares or contrasts the views of the different authors who have recently written on the subject. The original communications are—Disease of the Arteries of the Heart, by Dr. John W. Ogle; Epidemiological Conclusions and Suggestions, by Dr. Gavin Milroy; and on the Use of certain Drugs in Insanity—a practical paper by Dr. T. S. Clouston. The chronicle of micrology, physiology, and medical science finds its usual place.

A Descriptive Catalogue of the Warren Anatomical Museum. By J. B. S. JACKSON, M.D., Curator of the Museum, and Shattuck Professor of Morbid Anatomy. Boston: A. Williams and Co. 1870.—We call attention to this book chiefly for the purpose of reminding our readers once and again how laboriously careful and how properly liberal the Americans are in all their "public institution" publications. This catalogue, which forms a most valuable and handsome professional work, describes a collection of pathological and other specimens made by the late Dr. John C. Warren at the Harvard University. This museum now contains upwards of 3680 specimens, including 313 phrenological casts.

The book before us consists of 759 pages of very excellent descriptive matter; and in paying a sincere compliment to Dr. Jackson for the zeal and energy that he has displayed in the compilation of this book, we would at the same time commend it to the attention of those in our own metropolis who have, or are likely to have, work of an analogous kind to accomplish. We must not scorn to take a leaf out of the book of our Transatlantic brethren.

On the Construction of Hospitals for the Sick and Hurt. A Lecture delivered at the Royal College of Surgeons, Edinburgh. By A. W. WEMYSS, M.D. Edinburgh: Oliver and Boyd. 1870.—We notice this useful lecture chiefly for the purpose of indicating the existence in its pages of a sketch for a general hospital on the pavilion system which appears worthy of special attention. The rest is but a *réplique* of much that has been recorded or discovered elsewhere; but the pamphlet may be profitably placed with the more pretentious books of Miss Nightingale, Captain Galton, and others on the same subject. The laws of hospital hygiene are still in embryo.

The Monthly Microscopical Journal. Edited by HENRY LAWSON, M.D. No. XXII. October, 1870. — The present number contains (1) a paper by Henry Slack on the Patterns of Artificial Diatoms; (2) an important essay by Professor Rupert Jones on Ancient Water-Fleas of the Ostracodous and Phyllopodous Tribes (bivalved Entomostraca), in which a classification of the whole of the Entomostraca is given, and the Leperditiadæ at present known are described, of which Primitia solvensis and P. punctatissima are the oldest forms recorded, occurring as low as the Lingula flags of the Silurian strata; (3) a paper by Dr. Beale on the Real Nature of Disease Germs; (4) an account of the Histology of the Minute Bloodvessels, by Brevet Lieut.-Col. Woodward, Assist.-Surg. U.S. Army; (5) a description of a mode of obtaining Microscopic Crystals in Closed Cells, by A. W. Wills; and (lastly) an abstract of Mr. Hulke's Arris and Gale Lectures.

INTRODUCTORY ADDRESSES DELIVERED AT THE PROVINCIAL MEDICAL SCHOOLS.

QUEEN'S COLLEGE, BIRMINGHAM.

THE address was delivered by Professor BERRY, F.R.C.S. Remarking that the progress of the provincial schools was an encouraging proof, not merely of the general diffusion of high cultivation among the profession, but also of an advance in middle-class education, the lecturer touched upon the question of general education, and expressed a hope that in our public and grammar schools the system of education would be extended so as to meet the wants of the age. As far as medicine was concerned they had a right to demand that the Medical Council should be properly constituted, that the various grades of our profession should be truly represented, that the education in the three kingdoms should be more uniform, and that the members of the profession should have perfect freedom to practise untrammeled by mediæval privileges. He directed attention to the fact that while practical science had been making, during the present century, great and rapid advances, medicine had not been behindhand, but had achieved results as striking, and advanced with strides as rapid, as in any one department of science. He then went on to show the progress that chemistry and physiology had made during the present century, also how differently anatomy was studied to what it was fifty years ago, and the influence of pathological anatomy in giving us more correct views of morbid processes and results, showing us that diseases which were once thought to be due to inflammation were not so, and that the old notion of dropsy of the chest was only a result of some form of disease of the heart. The microscope came to the aid of the pathologist, and disclosed to us the true nature of some diseases, and changed our views with respect to others, especially as regards certain cutaneous eruptions, proving their vegetable or cryptogramic origin. Besides this the microscope had been of essential service in discovering affections which were before unknown, as leucocythæmia and sarcina ventriculi. Pathological chemistry had made great advances of late, and was, the lecturer believed, destined to advance more than any other department of medicine; and medical men were looking more and more to an extension in the knowledge of the nature and treatment of diseases by microscopic discoveries in the fluids, rather than by an increased knowledge of the varying vital forces of the solids of the body. He then endeavoured to point out that such advantages in professional knowledge and professional resources gave undoubted evidence of sound and solid progress in surgery and medicine in these later times. He spoke of the more clear and correct views of the pathological doctrines of inflammation, as exemplified in the more modern and simplified management of wounds and injuries, in the improvement of individual operations, the introduction of new operations, the inestimable advantage derived from chloroform, which permits the surgeon to recommend operations which, before its introduction, the voice of humanity would have rejected as too painful and horrible. The advance in medicine had been as remarkable as in surgery. The physician had acquired a far more extended knowledge than his predecessor of the last generation had of the nature and diagnosis of the various diseases to which the body is liable. In proportion as his knowledge had been precise and clear, so also had he been able to use his remedial means with greater precision for the relief and removal of them. They had also learnt to know more precisely when they ought to strike in to aid nature with the resources of art, and when they ought to leave nature to her own unassisted efforts. Every step of true progress in this knowledge formed, undoubtedly, a step of true advancement in practical as well as scientific medicine. As evidence of how much practical medicine had progressed, he adverted to many improvements in the practice of medicine in relation to particular diseases, as scurvy, now banished from our fleets; the improved treatment and detection of the oxalic, phosphatic, and other diatheses, indicated by the state of the urine; to our increased knowledge of the diseases of the head, chest, abdomen, and pelvis; and to the vast addition made latterly to our previous knowledge of the importance of various prophylactic and hygienic resources in the prevention of disease.

QUEEN'S HOSPITAL, BIRMINGHAM.

THE introductory address was delivered by Dr. FLEMING, who observed that the study of medicine involves a most comprehensive acquaintance with the structures and functions of man, and, in its search for means to relieve and cure disease, leaves no part untouched of the entire domain of human knowledge. It is this union of intellectual activity in the study of the *science*, with the power of benefiting human nature by the practice of the *art*, of medicine, that forms its great attraction to the student and the philanthropist. The difficulty of the study of medicine arising from the complexity of its phenomena as a science, and still more as an art, was then touched upon; and after dwelling on the order of the sciences, and their intimate connexion with the study of medicine, the lecturer proceeded to the consideration of the distinction which subsists between medicine as a science and medicine as an art. The art consists, he said, of a series of rules of action directing how to cure or prevent the disease which the science has enabled us to understand. There are many arts, however, which may be practised with success where the sciences on which they are founded are unknown to the practitioner; take photography and telegraphy as examples. The student may therefore ask, Why should he spend so much time in studying the science of medicine in order to practise the art? When the science on which the art is founded is perfect, the rules which form that art are certain, and admit of universal application; and the more nearly the science approaches perfection, the fewer exceptions do we find to the rules in the arts dependent on it. At present the science of medicine consists of a number of groups of biological facts, often unconnected by any known fundamental law; it is, in fact,

an imperfect science. And though in the greater number of cases certain effects follow certain remedies, there are always sufficient exceptions to remind us that we have to deal with vital phenomena of a very complex and uncertain nature, and which oblige us to fall back on the science from which our art springs. Were the public made more cognisant of this fact, it would put a stop to a great amount of evil, and amateur doctoring would be looked upon as too dangerous, even for the most adventurous. "Infallible cures" and "universal remedies" would then meet with the contempt they deserve.

Reference was then made to the kind of knowledge which students should strive to attain; they were advised to confine themselves for the present to essential studies, and to assign their time and thought to the several subjects, in measure corresponding to their relative importance.

Some remarks followed upon the personal qualities to be cultivated as essential to a satisfactory professional career. "Carefully avoid," said the lecturer, "a cavilling and sceptical spirit; honour your profession; believe earnestly in its great and acknowledged truths. Of all blighting influences, scepticism is the worst, paralysing every power of inquiry, and, at its source, the well-spring of knowledge. I cannot resist this opportunity of stating in the most complete terms my abhorrence of those teachers who, unmindful of their grave responsibility, instil doubt and suspicion as to the very foundations of our art into the minds of the young. I have had occasion over and over again to verify the unhappy results of this evil influence in a stunted and blighted knowledge, and in the aimless and spiritless pursuit of a profession in which the unhappy sceptic has no faith, and therefore should expect no success. In conclusion, I desire for each and all of you a strong, clear mind, a heart full of courage and kindliness, and a deep sense of your responsibility both to God and man."

UNIVERSITY OF DURHAM COLLEGE OF MEDICINE, NEWCASTLE-UPON-TYNE.

THE address was delivered by Dr. T. C. NESHAM. After a short sketch of the gradual development of medicine, the lecturer remarked that in his time medical education had undergone many changes, and he was satisfied that the principle which had underlain them all was a beneficial one—namely, that there should be less teaching and more learning; that the student should rely more on himself and le s on his lectures; that the professor should meet his class more in the dissecting-room and at the bedside than in the lecture theatre.

He then proceeded to impress on the students the absolute necessity of devoting the first two or three years of their studentship to the study of human anatomy, physiology, and chemistry. The only way to learn anatomy was to take scalpel and forceps and dissect for themselves, and the training they would thus receive would regulate and strengthen their minds in the right way; for here there was no passing from appearances to brilliant hypotheses; everything was a fact, and could be demonstrated.

Physiology and chemistry were so allied that one could not be understood without the aid of the other. Just as in the study of anatomy he had pressed on them the advantage of dissection, so in that of physiology he urged the necessity of practical experiment and self-conducted analysis; and it was in the conducting of these inquiries they would find the great advantage of the teacher, gaining from his experience the best method of following out research, so as to avoid the errors of conclusion into which a tyro might fall.

At the end of two or three years they would pass on from a sound basis of preliminary education to the study of morbid action—to the science of the practice of medicine. And where were they to learn this? A little in the lecture-room, a little more in their study at home, but most of all at the bedside of the patient, where they would see morbid action in all its different phases of development, trace its course from day to day, and mark the result of efforts made to alleviate and cure. In the study of medicine they might avail themselves of either the inductive or deductive methods of reasoning; but whichever they employed they must be sure to verify every step of the argument by practical experience, or else the complete theory would be a source of danger, and the propositions they had deduced would be found in practice to be erroneous. He desired them to remember that, more than 2000 years ago, Hippocrates had recognised the fact that nature when attacked by disease had a tendency under certain conditions to restore herself to health. If they wished to be successful practitioners they must remember this power, the "vis medicatrix naturæ." It was one great secret of the advance of our knowledge that we used as far as possible, in the study of medicine, scientific argument and logical sequence, but at the same time qualified and regulated them by practical experience, and thus endeavoured to establish the agreement of "theory with practice, and of reason with experience."

In urging the advantage of pathology the lecturer proceeded: "The post-mortem room must be as familiar to you as the walls of the hospital. I would have you enter it with feelings of reverence and awe, with your minds earnestly bent on scientific investigation. You go there to rifle the dead of their secrets, for the benefit of the living, and not to gratify inquisitiveness or idle curiosity. Much that was dark and obscure will be revealed, the cloud of uncertainty which hung over many perils will be rolled away, and perhaps some errors of diagnosis detected. Pathology is as yet only in its infancy, and I look to improvements here as one great source of the future advance of medical science."

In speaking of their acquaintance with the remedies in disease, he asked them to pay special attention to the action of medicines; to institute a philosophic and practical inquiry into the therapeutics of medicine, rather than spend their time in learning the manufacture, and detection of adulteration, of drugs. He pointed out all the Pharmaceutical Society had done, and he hoped medical practitioners would give up dispensing their prescriptions, and that chemists would give up the objectionable habit of counter-prescribing; and he looked forward to the time when the pharmaceutist should gain his living by the prosecution of his own duties, and the practitioner be remunerated for the work of his brains, and not for the number of his bottles. The University of Durham had recognised the close connexion existing between the physician and the pharmaceutist, fellow-workers in different ways at the same study, and had founded a chair of pharmacy in this College.

LEEDS SCHOOL OF MEDICINE.

THE address was delivered by Mr. E. ATKINSON, the lecturer on botany, who dwelt first upon the importance of established principles of conduct, and next upon the value of an orderly and methodical disposition of time to the student. On the subject of preliminary education Mr. Atkinson said:—"Before presenting yourselves here for the commencement of special professional studies, you have all, as in duty bound, submitted to one or another of those very moderate previous examinations in arts (as they are rather magniloquently styled) which the authorities require. But let me hope that the measure of knowledge exacted from you on that occasion is no true guage of your acquirements. Indeed, it is difficult to imagine what art is illustrated by this elementary process, except it be the art of legerdemain, in converting a very ordinary schoolboy into a certificated student. Greek, for example, is an optional subject, while half the technical terms employed in medicine and the allied sciences are derived from this language; and how, then, are we to expect you to understand words which will meet you at every turn unless you have some previous knowledge of it. Mathematics, again, are required to so small an extent that, unless you have proved yourselves more than a master for your examiners, it may be doubted whether the main object of this branch of science—viz., the acquisition of a habit of close reasoning—has been attained; while the rudiments of chemistry and the natural sciences are left out of the field altogether. The authorities have, doubtless, done well to require satisfaction as to the previous knowledge of candidates for medical education by instituting these examinations; but have they gone far enough? Our daily experience says they have not. The four years usually allowed to special professional study are not any too long for the purpose. The student, therefore, ought to come to us thoroughly grounded in all that pre-

liminary knowledge of which he will need to avail himself in dealing with special subjects. Were it the universal custom, as happily it has lately become in a few public schools, to make chemistry, botany, and the elements of zoology necessary parts of a liberal education, how much easier would be the transition from the general to the special. How would the powers of observation be quickened and the habit of appreciating minute differences, of careful comparison, and of thoughtful reasoning, be acquired. How well could those who, as boys, had been taught the first lines of plant and animal structure be prepared for the serious work of investigating the body of man. Much in our days is required of medical men, and therefore much will have to be required of medical students; more, indeed, than they can acquire during their term of studentship. What is it, then, but that the standard of preliminary examination must be raised?" The lecturer went on to notice the various subjects in the curriculum of study, remarking that no other profession demanded from its votaries so large and varied a list of acquirements. The remainder of the address was taken up with advice to the students, the speaker laying particular stress on systematic and careful note-taking, on the experience to be gained in connexion with the hospital, and on the importance of never missing a clinical lecture.

LIVERPOOL ROYAL INFIRMARY SCHOOL OF MEDICINE.

IN his address, DR. J. CAMPBELL BROWN referred to the practical tendency of reform in medical education, and the student was urged to pay more careful attention to the systematic courses of lectures, with the view of seizing upon the principles and laws of each branch of science which he studied, and learning such facts as either illustrated those principles or had some special bearing upon the art of healing, rather than make himself profoundly versed in all the details of any one science. The evils which arise from the multitude of examining and licensing bodies were noticed, and students were advised to aim at the highest degrees in medicine and surgery, not so much on account of the honour and position which they would bring, as on account of the stimulus which they give to the acquisition of a sound and liberal education. The great facility which the Liverpool school offers for gaining a high-class medical education were pointed out, and the improvements which have been made during the past year were enumerated.

"But whatever facilities are afforded for gaining knowledge and practical experience, the progress of himself and the school rests with each individual student; for the most important part of every man's education is that which he gives to himself. The first requisites to successful study are: steady application and concentration of the mind, and a retentive memory; the latter may be acquired, 1, by repetition; 2, by associating new facts with old; and, 3, by referring facts to the principles which they illustrate."

MANCHESTER ROYAL SCHOOL OF MEDICINE.

THE address was delivered by Mr. LEO H. GRINDON, Professor of Botany. In the course of his remarks Mr. Grindon referred to the opinion which had been lately expressed by an eminent physiologist, that both chemistry and botany should be omitted from the curriculum of study in medical schools; he said, God forbid that the day should ever come when it should be said that medicine was unfaithful to its first love, and that the allegiance of more than 2000 years had come to an end. It might be that Professor Huxley objected rather to the particular portion of botany to which the student was too often required to give his first attention—an attention quite as frequently repelled by it as allured. The student who was wishful to learn how to distinguish dulcamara from belladonna, and to possess clear notions of the general aspect of deleterious plants, as contrasted with harmless ones, could not be expected to feel either gratification or encouragement respecting phyllotaxy and bothrenchyma. To that student botany so initiated might well seem a useless burden, and he (the lecturer) could not see how the student was helped towards the practical knowledge of pharmaceutical and poisonous plants by being saturated with minute vegetable anatomy. Vegetable histology was one of the noble pastimes of every true botanist, and a large acquaintance with it was one of the special ornaments of his profession, but to commence with it was to enter the temple through the roof instead of the portico. He did not believe that Professor Huxley, or anyone else, could deem it superfluous that the medical student, in addition to receiving a good groundwork of structural botany, with its complement of physiology, should be shown, as in their Manchester school, specimens, or other intelligible illustrations of every plant mentioned in the Pharmacopœia, and of every plant the name of which cropped up periodically in connexion with deaths by accidental poisoning. That the practical department of botany involved in its teaching far more labour and anxiety of preparation than was needed to illustrations of histology, might account for the preference given to the latter; and if teachers were not able or willing to undertake that labour, it certainly was a reasonable question—Had not botany better be out of the curriculum? The position which he contended should be that of the medical man would be attained exclusively by his becoming a man of science. It was a part of the dignity of the profession of medicine that it stood in the middle of all the sciences, and, like the forum of ancient Rome, in which converged roads from every principal part of the empire, had relations with all that was brilliant in human knowledge. No branch of science should come wrong to the medical student, though certain departments must needs claim his prior attention. That which England rested upon for her wealth and influence was her science; and happy would be the day when the incontestable truth was recognised in the highest quarters, and science was endowed as it ought to be. Medicine itself was a science, and though not one of the exact sciences, it partook of the improved complexion of science in general.

THE ROYAL VETERINARY COLLEGE, LONDON.

THE address was delivered by Professor TUSON, who adverted to the measures taken by the Governors for raising the standard of preliminary education, and urged upon his hearers that the profession of veterinary as well as of human medicine called for a high degree of mental training. To be thoroughly competent to diagnose and treat the diseases of the lower animals in all their phases, the amount of medical knowledge required is not less than that essential to the practitioner of human medicine. He saw no reason why the veterinarian should, if he but possess the right kind of ambition, occupy a social position in any way inferior to that of the physician or surgeon.

The curriculum of study was then commented upon, the importance of chemistry being especially pointed out. He wished the students to become competent to undertake research, so that, whenever a rare or imperfectly known epizootic made its appearance, the duty of investigating it might be committed to their charge, and not to that of the physician or surgeon, as was chiefly the case during the comparatively recent outbreak of cattle-plague.

The lecturer then directed attention to some of the improvements which had taken place in that institution during the last few years, to illustrate the superior advantages which the student of the present day enjoys for obtaining a knowledge of veterinary science over those possessed by his predecessors. Ten years ago, there were an indifferent lecture-theatre, an indifferent museum, an indifferent dissecting room, an indifferent post-mortem house, and a wretched laboratory. At the present time, although there was still room for considerable improvement, they nevertheless possessed appliances which, for all the practical purposes of teaching, were surpassed at few medical schools in the kingdom.

The opportunities for improvement which were open to the students by becoming members of the Veterinary Medical Association—a society possessing a library of medical works, a collection of microscopes and microscopic apparatus, and at whose weekly meetings pathological specimens are exhibited and essays read and discussed, were alluded to, and the lecturer concluded by assuring his hearers of the deep interest taken by the governing body of this College in all that concerned its advancement and success.

THE LANCET.

LONDON: SATURDAY, OCTOBER 15, 1870.

THERE exists a school of would-be social reformers, not very large it may be, but very noisy and self-asserting, who have stated in plain terms that the birth of children is a source of national weakness. Some of this school have advocated the necessity of avoiding the natural increase of families; and decent people, while they have as a rule shunned expedients of questionable morality, have been too apt unthinkingly to assume that what was so strongly asserted must be true in principle, and that this increase is indeed the chief cause of misery in the home and of pauperism in the State. Rome thought differently; and she conquered the world. With her, the citizen who was so abject that he could render no other benefit to the commonwealth had still power to serve it by his virility, was still the *proletarius* who was able to beget offspring for the good of his country. An old-fashioned Book teaches that children are the heritage of the LORD, and that the man is happy who has his quiver full of them. Proverbial lore, "the wisdom of many and the wit of one," tells us that where GOD sends mouths he sends meat; and experience points to the way in which large families succeed in the world, and to the goodness of the wife who is "taken out of a bunch." All this, however, is as nothing to the Malthusculi of our generation; and their policy of stating as an axiomatic proposition, unnecessary to be proved, that what they call over-population is an evil, has borne its fruit in persuading weak and timid and selfish people to assent to a notion in which there is some superficial appearance of plausibility, resting on no other ground than the practical abandonment of governing, which is the curse of modern England. It is doubtless true, in the condition in which we live, that a large family is an occasional cause of distress to individuals. The course of our civilisation places many men in positions in which they can hardly keep themselves; and, if they marry and have children, their children are born to poverty. If poverty meant industry, and placed no barrier in the way of primary education, we are not sure that anybody would be hurt. We take it that the evils of large families are mainly due, not to numbers, but to the way in which those numbers are neglected by the State. English politicians, while they have fought to the death over questions of patronage and party, have taken their standard of the duties of statesmen from the demands of ten-pound householders; and have acted as if all the responsibilities of Government were summed up in WALPOLE'S favourite maxim—"*Quieta non movere.*" The children of beggars and thieves have been allowed to grow up beggars and thieves, and to become a yearly increasing canker and curse to the community. The children of the weak and the thriftless have been allowed to sink to the same depth without a helping hand, and those of the poor curate have been kept back from the National School (where, by the way, they would have learnt nothing worth knowing) by the strong arm of MRS. GRUNDY; and have never been impelled there by the Legislature. The struggling man with children has been encouraged to cling to some imaginary respectability which has done nothing for his family but deprive them of advantages, solid though small, which are enjoyed by those whom they fancy beneath them in the social scale. It is to be hoped that now, the principle of rendering primary education compulsory having been asserted, we shall in time see steps taken to render it efficient, and not not only useful in itself, but also a basis for higher teaching. That every child shall be sent to a school at which it can learn something, and that the children of the profligate or the weak should be forced towards paths of industry by the guardianship of the State, is all that is needed in order to make national fecundity a source of wealth, strength, and prosperity. Herself the central market of the world and the possessor of numerous colonies, England can never be over-peopled; and, as a matter of fact, is far less densely peopled than some other countries from which, even now, she might learn useful lessons. It is her business to teach every child to become a producer; and each one with whom she succeeds will be a source of strength to his country during life, and will leave it richer at his death.

The contrast now presented to the world by the French and German nations is one that should be carefully studied with regard to this most important subject. The original superiority of the French as a race is too manifest to need illustration. The Gauls, receiving in the south the genius, the subtlety, and the refinement of the Greek, and in the north the hardihood and the power of command of the Norseman, fused these elements of greatness into a people with such mental and physical advantages that they should have been the natural rulers of Continental Europe. But their fatal system of the perpetual subdivision of real property has led gradually to the habitual limitation of the number of children permitted to be born in the family. The consequent separation of husband and wife has loosened every domestic tie; or the other alternative, the use of mechanical contrivances for avoiding conception, has been the cause of innumerable illicit amours, and, by removing the fear of shame from women, has permitted thousands of them to abandon themselves to their passions without restraint. Now such devices are in all cases eminently injurious to the male; and to the female they are fertile sources of uterine disease, and of all the morbid exaltation of the nervous system which such disease entails. We need hardly look beyond these conditions for an explanation of the disorder that reigns in unhappy France. The healthy union and due subordination of the elements of the State are only the aggregate result of the same union and subordination of the elements of every family; and in the absence of the latter the former will be impossible. Alternations of vituperation and panic are natural enough in a people who for three or four generations have used the relations of the sexes chiefly as a means of stimulating and gratifying lust; and whose nervous organisation has been unstrung by their habitual recourse to unnatural and demoralising practices.

If we turn now to the Germans, we find a race who

have emerged in comparatively modern times from barbarism, and who, as regards the refining influences of civilisation, may in many respects be called the Chinese of Europe. Generally coarse in their tastes, and rude and arrogant in their manners, the Germans have yet thoroughly appreciated the value of the family and the home. Among the lower classes female chastity is highly esteemed, early marriages are the rule, and natural fecundity proceeds uncontrolled. For the utilisation of this fecundity the State intervenes, first with the school and next with the army. Every German child receives at least the rudiments of a real and useful education, such as he may turn to good purpose in after-life. Every German serves for three years in the army,—where, if he be a prince, he learns to respect the honesty, the intelligence, and the bravery of the peasants with whom he drills; if he be a student, he learns that there are kingdoms beyond the world of thought; and if he be a peasant, he learns that princes and students are his betters in more essential things than the gifts of fortune or the results of higher education. And, to crown the result, all classes alike learn that obedience is the first duty of men. They go all the world over as tourists, as emigrants, as traders, as artisans. But, when their country has need of them, the bell rings and they come home. It is not irrelevant to our argument that there are so many of them to come, and that these many are the results of the due discharge of a physiological function by healthy organisms, and not of the accidental failure of some ingenious precaution or some degrading practice. It is a matter of course that their strong frames and their power of "staying" should make them more than a match, other things being equal, for the spasmodically excited debility of their rivals. But whatever the result of the present disastrous war, whether the manhood of France may rouse itself for a supreme effort, or whether the exhausted country will at last perforce accept peace at the dictation of Germany, the conflict will in either case have taught the value of men, and the importance of educating and of training children. We trust that its lessons may not be lost upon Englishmen, and that the *soi-disant* philosophers who have advocated French practices among ourselves may at least be silenced by so huge a demonstration of the goal to which their teaching tends.

IN a recent article we briefly enumerated what appear to us to be the drawbacks to the Medical Service of the Navy; and we have now to fulfil our promise of stating what are the advantages *per contra*.

The inducements which the Naval Medical Service offers to young medical men who feel disinclined to settle at once to the ordinary routine of country practice, either as principal or assistant, and whose ambition does not soar to the height of waiting for consulting practice, seem to us to be the following.

Provided he be physically fit to undertake active duty in varying climates, and can pass an examination not more severe than those he ought to have passed in order to obtain a double diploma, the young assistant-surgeon will be at once entitled to pay at the rate of 10*s.* per diem, or £182 10*s.* per annum. His outfit, if moderate, will not be very costly, and his mess expenses and servant will leave him sufficient to free him from all liability in respect to outfit within twelve months with ease, even if he is obliged thus to anticipate his income. At the end of five years' service the assistant-surgeon's pay rises to 12*s.* 6*d.* per diem, or £228 per annum, and, after ten years, to 15*s.* a day. The present rate of promotion is so miserably slow that assistant-surgeons of over ten years' standing are still unpromoted; but those entering now have the advantage of a recent Admiralty regulation, by which the successful candidate who passes the best examination of his year of entry will receive promotion after five years, and the second best man after seven years. On promotion, the surgeon's pay rises to £319, after fourteen years' service (including those passed as an assistant-surgeon) to £365, and after eighteen years to £401 10*s.* per annum; but, if moderately active and fortunate in his opportunities, the surgeon will before this have become a staff surgeon on £438 per annum, and the pay of that rank rises as high as £529 per annum. The numbers in the senior ranks of deputy-inspector and inspector are of course very limited; but should the staff surgeon have shown professional and administrative ability, he may aspire to these coveted posts, the emoluments of which range from £500 to £800 per annum. As regards the social position which the medical officer enjoys on board a man-of-war, great improvements have confessedly taken place of late years. Every medical officer now enjoys a cabin, and messes in the ward-room—i. e., with all the senior officers except the captain; and it is his own fault if the surgeon is not treated as a gentleman.

We have not space to refer minutely to the questions of half-pay and retirement, which will be found discussed at length in our number of March 12th, 1870. It is here, no doubt, that the attractions are wanting; for it is only after twenty-five years' service, and when his age must be at least close upon fifty, that the staff surgeon can retire upon £400 per annum. To render the service really popular, the Admiralty must give the right of retirement on some moderate pension at an early age, so that naval surgeons who are weary of a sea life and anxious to settle on shore may do so without losing all reward for their past services. At the same time it is essential that better provision should be made both for the employment and retirement of the senior ranks; and when, by both these methods, a steady stream of promotion is set agoing, the Admiralty will no longer have reason to complain, as at present, that recruits are not to be obtained.

THERE are, perhaps, few points on which our information is less complete than in regard to the mode in which purgative medicines operate. Yet they are administered by practitioners of all shades of opinion with a freedom from hesitation or doubt that would lead an unprofessional observer to believe that their mode of action must have been thoroughly investigated, and that the laws governing their action must be accurately understood. In some instances, indeed, an explanation has been advanced; but this generally proves extremely unsatisfactory on close examination. Take, for instance, the alleged explanation of the purgative action of the neutral salts—such as sulphate of magnesia.

We are told that they only act as purgatives when their concentration is greater than that of the blood, and that they thus promote excretion and exhalation from the intestinal mucous membrane by a kind of exosmotic action. But surely this is not sufficient to account for, and we apprehend that few would be inclined to accept it as truly representing, the action of these remedies. In other cases we are called upon to admit a local irritant action, as in the case of croton oil, senna, and rhubarb; but whether these affect the vessels alone and primarily, or the sympathetic system of nerves primarily and the vessels secondarily, is at present a matter of speculation. Whilst, lastly, of the action of those remedies that, like elaterium and podophyllin, contain an insoluble resin as their active principle, and purge smartly in exceedingly small quantities, no rational explanation has as yet been advanced. Some experiments have, however, lately been made by our neighbours indefatigable in science as in war, with a view of elucidating the action of the resinous purgatives, to which we shall call the attention of our readers.

In the first place, HAGENTORN, from numerous experiments made with the resin of the convolvulus, or convolvulin (allied to the resins of jalap and scammony), on cats, has shown that neither the resin itself nor a salt of the resinoid acid is capable of producing purging when rubbed into the skin or applied to the mucous membrane of the nose or stomach, or even when injected into the jugular vein. As much as sixteen grains of convolvulin might be introduced into a loop of intestine, the contents of which had been carefully expressed and a ligature applied above and below, and it might even be allowed to remain for twenty-four hours, without producing any other effect than that of reddening the mucous membrane. UNTIEDT repeated and confirmed HAGENTORN'S observations; and noted, further, that subcutaneous injection of the convolvulinic acid was inoperative. He also introduced the resin into the rectum, both pure and combined with taurin and with choloidinate of soda, and still found no action; but he made the important discovery that if the resin were mingled with bile or with the biliary acids solution quickly occurred, and violent diarrhœa speedily set in; and these results were fully established by BASTORN for the resins of jalap and scammony, and by DARASZKIEWITZ for gamboge; whilst SCHAUB subsequently showed that resins in solution in bile at once acquired a certain degree of diffusibility.

All these observations, then, point to the general conclusion that the purgative action of the resins is due to a local irritation produced by their substances after their solution in bile. This view receives full support from the interesting observations detailed by Dr. KÖHLER in the last part of VIRCHOW'S *Archiv*, who arrives at the conclusion that the irritant or drastic cathartics may be divided into two or three classes—namely: first, into those for the action of which bile is *not* essential, as aloes, croton oil, senna, and rhubarb; and secondly, those for which it is requisite that bile should be present, to act as a solvent and to promote the diffusibility. Of these, two sub-classes may be made: one including jalap, scammony, gamboge, and mushrooms, which, when dissolved, simply act as local irritants; the other including the drastic cathartics of the cucurbitaceous order—elaterium, colocynth, and bryony, in which there is not only a local action of the dissolved resin, but a secondary one on the nervous system after its absorption into the blood.

THE amalgamation of the medical schools of London is, we think, one of the most important and pressing questions of the day. All scientific men are convinced of the absurdity and practical impossibility of carrying on scientific teaching in eleven separate establishments in London; and many teachers, and probably most pupils, agree in this opinion. The difficulty is to bring the question to a practical issue, and we earnestly commend the subject to the Medical Teachers' Association for their discussion during the present session. In the mean time we will point out how some steps in the desired direction might be readily taken.

The two large hospitals, Guy's and St. Bartholomew's, which have hitherto had the largest number of pupils, we are content to leave out of the question for the moment, as they have hitherto refused to join the Medical Teachers' Association, and their prejudices of long standing would probably interfere with any scheme which might be proposed. Whether it will be for the ultimate benefit of those institutions to stand aloof from the great teaching union of the metropolis we doubt; but at present we need only concern ourselves with the remaining nine institutions.

The object of any amalgamation must be, the better teaching of the scientific subjects of the medical curriculum—anatomy, physiology, chemistry, physics, pharmacy, and botany; leaving the strictly medical subjects of medicine, surgery, midwifery, and pathology, to be taught at the several hospitals by lectures, demonstrations, clinical instruction, &c., as may be arranged. Now, leaving out the two hospital schools we have named, and perforce the London Hospital in the extreme east, it will be obvious to anyone studying the map of London that the remaining eight schools fall naturally into two north-west and south-west divisions: the north including University, Middlesex, and St. Mary's; and the south, King's College, St. Thomas's, St. George's, Charing-cross, and Westminster. As regards the northern division, little difficulty need, we think, be anticipated; for coy overtures have already passed between University and Middlesex, which are only half a mile apart, and St. Mary's must be ready for some change, to judge by the introductory address of Mr. GASCOYEN, whilst it is within two miles of University, and has omnibuses and an underground railway from door to door. If the three hospitals did not together afford sufficient clinical appointments for the united students, it would be feasible to increase them by taking in, in addition, the Royal Free and the Great Northern Hospitals, both of which institutions have a considerable number of beds.

The southern union would be more difficult to arrange, owing to the probably rival claims of King's College and St. Thomas's to be the centre of theoretical teaching. Both institutions have seen better days, but it is difficult to say at present which will bear away the palm in numbers during the next year or two. St. Thomas's would undoubtedly be the more convenient, since the students of St. George's especially would have ready means of conveyance to Stan-

gate, and the distance would be shorter than to Somerset House. Setting aside all scientific argument, as a matter of finance it must be obvious that the collection of the students of eight hospitals into two large schools would allow of the full remuneration of professors devoted to their work of teaching, and chosen simply with that view, and not to suit the exigencies or conveniences of eight hospital staffs. Such chairs would be worth competition; and probably the only way to fill them without a suspicion of jobbery would be to institute the system of *concours* for at least the junior posts. The advantages of concentration as regards the supply of subjects would also be great; and thus several of the hospitals would be relieved from the present unjustifiable practice of having a dissecting-room within the hospital precincts and in close proximity to the wards.

Of course time and trouble will be necessary to bring about any good result in such an important arrangement as that we have indicated, but we feel assured that effort will not be wanting among the teachers in order to effect a great and pressing reform.

As President of the Health Section of the Social Science Congress at Newcastle, Mr. RAWLINSON was emphatically the right man in the right place. His long and intimate association with public sanitary works in this country, the eminently practical bent of his mind, and the straightforward expressiveness of his speech, combine to make him a preacher well worth the hearing on a text so familiar to him as was the subject of his Newcastle discourse.

In his survey of the general position of sanitary affairs, he was naturally led to notice first those statistical evidences of sanitary condition which the population and registration returns supply; pointing out, as we have often done, the want of such a revision of the registration areas as will admit of mortality rates for urban and rural populations being accurately given in the official reports, the rates professing to distinguish between town and country which are now published being at best, as Mr. RAWLINSON says, "imperfectly instructive." We are glad to observe that in the discussion on sanitary organisation, in the Health Section, Dr. FARR advocated the appointment of a commission for the revision of the existing local areas, so that, if any importance attaches to a concurrence of opinion among competent judges, we may expect something will be done ere long to remedy the defects alluded to. Referring to the literature of sanitation, or to that largest section of it which consists of official reports, Mr. RAWLINSON remarked that, if the work of the State stopped short with inspecting and reporting, it was nothing more than a delusion and a snare. Much "having the honour to be" is evidently as little to his taste as it is to the taste of Mr. CARLYLE, unless it leads to something practical. Thus the seven hundred places in which inspections and reports have been followed by works furnish an argument for putting the whole of England into a good sanitary state. The cost would be great—in round numbers fifty million sterling. But, large as is this figure, we have no hesitation in believing that the investment would be profitable every way; that is, supposing money could be obtained for the purpose on terms similar to those on which the loan was granted for public works to the cotton famine districts—namely, at 3½ per cent. interest for a term not exceeding thirty years. "If Government," said Mr. RAWLINSON, "would lend money at this rate of interest to enable parish authorities, town councils, local boards, improvement commissions, and other similar public bodies, to improve dwelling-houses, to sewer, drain, construct water-works, markets, &c., and to effect street, road, and other town improvements, the progress of the whole country in sanitary improvements would be rapid, and the Registrar-General would soon be enabled to record the beneficial results in his Returns; pauperism would cease its alarming growth, and crime would be lessened." As regards the first of these desiderata—the improvement of the house accommodation of the poor,—there is abundant proof that money can be judiciously expended for that purpose, with the certainty of a fair return for the outlay. The Associations for providing London artisans and labourers with wholesome and comfortable dwellings all pay five per cent. on the capital invested. When, therefore, Mr. RAWLINSON tells us that "defective house accommodation produces disease, immorality, pauperism, and crime, from generation to generation, until vice has become a second nature, and morality, virtue, truth, and honesty are, to human beings so debased, mere names," we must needs agree with him that hitherto the State has utterly neglected its plain duty of grappling long ago with so fruitful a source of misery and danger to the community. There seems to be a probability that, in the next session of Parliament, an endeavour will be made to procure legislation upon some at least of the matters affecting health and social condition; and we therefore earnestly commend Mr. RAWLINSON'S address to the careful study of those honourable members who stand in need of enlightenment—a large majority of the House of Commons, we fear—as to what this country most urgently requires at their hands. Let them note well that "the aim and end of statesmanship ought to be to ensure to every individual born in the State means of health and of morality." *Dilettante* attempts at law-making are not wanted, nor the spasmodic exuberance of the "new member, full of his subject, and anxious to immortalise himself," who is described by Sir C. ADDERLEY as rushing off to St. Stephen's, and, in ignorance of everything that has been previously done on the matter with which he proposes to deal, succeeds in getting "one more statute added to the tesselated system of legislation upon the delicate subject of the health of the people." The public health is not merely a delicate, but a grave and complicated question; one to tax the energies of thoughtful men, and therefore one whose solution is in every way worthy to be undertaken without further delay by the British Legislature.

THE Medical Department of the Privy Council has been looking up the Brighton guardians in reference to vaccination defaulters. Dr. Seaton has informed the guardians that the provisions of the Act are not permissive, but imperative; and "my Lords," therefore, want to know how matters stand in Brighton.

Medical Annotations.

"Ne quid nimis."

MEDICAL NOTES ABOUT SEDAN.

A CORRESPONDENT, writing from Sedan at the end of last month, says the place affords one of the most extraordinary sights imaginable. The town was full of conquering Germans. The shops were open, and business was going on, but the people were so utterly cast down as to care little or nothing about anything but their misfortunes. At the chief hotel, the "Golden Cross," it was evident that they did not care for customers, and would rather have been without them. They affirmed that food was not procurable, and our correspondent strongly suspected that a beef-steak, which he was so fortunate as to secure, was a piece of an old charger. The hotel was neglected, filthy, and very odorous. An extraordinary number of captured cannon (mostly rifled) and mitrailleuses were to be seen. Many of the cases under the care of Dr. Frank, scattered in detached hospitals at Balon and Bazeilles, were of great interest in a surgical point of view. The Prussian military medical authorities had been in the habit of visiting the various hospitals about Sedan at different times, and the process of removing the wounded was taking place so actively that they would all soon be evacuated. Some patients were sent to Belgium, and others to Germany, *viâ* Pont à Mousson. Those who were pronounced by the surgeons as not likely to recover from their wounds in less than three months were allowed to go home. The Prussian and French surgeons did not appear to amalgamate together very well. The national hatred was too strong to be overcome by any professional sympathy. The French wounded, as might be anticipated, were the most depressed, and the most desirous of getting away from the hospitals, where they were mostly attended by foreign surgeons, to their homes. On the other hand, the Germans naturally placed more reliance upon the medical attendants, evinced less irritability under restraint, and a greater desire to secure their own ultimate recovery.

A NEW METHOD OF STUDYING THE CAPILLARY CIRCULATION IN MAMMALS.

IN the just published part of the *Quarterly Journal of Microscopical Science* (No. 42), Dr. Stricker and Dr. Burdon-Sanderson introduce a new mode of dealing with a subject of considerable interest and importance. The purpose of their method is to promote the observation of the way in which the blood streams through the smallest vessels; to exhibit the visible changes that take place in the living tissues around these capillaries, and to show the relation between these changes and the circulation. Hitherto such observations have been made only in the transparent parts of cold-blooded animals, and the earlier observers were contented with mechanically restraining the movements of the animal. More recently Professor Stricker has employed curara, or woorara, in order to render the animals quiescent, with the best results, the phenomena of the capillary circulation being then traceable for many hours with the greatest precision. Cold-blooded animals, however, are liable to the objection that the phenomena both of their healthy and of their abnormal nutrition are carried on under conditions that are very remote from those that exist in man. To obviate this difficulty, the bat has been employed by some observers, and notably by Mr. Paget and Mr. Wharton Jones in their experiments on inflammation. The thickness of the integument, however, in this instance offers many difficulties in the way of minute observation; and Dr. Sanderson, having previously experienced the advantages accruing from the employment of the omentum of the guinea-pig, recommends its adoption for the present object. The omentum in this animal is of considerable extent, is attached to the greater curvature of the stomach, consists of only two layers of membrane, and contains but very little fat. It is, consequently extremely transparent, and possesses the further advantage of being easily accessible. To avoid pain the animal should be chloralised. When thoroughly under the influence of this agent, the abdomen should be opened, and the omentum withdrawn with the greatest gentleness and care. So thin a membrane would, however, speedily dry up if exposed to the air; and the authors of the paper suggest a plan by which the vital processes may be watched for long periods without interruption, and in a condition not far removed from perfect health. It consists in immersing the membrane at once in a dilute solution of common salt, which constitutes an indifferent fluid, and does not appreciably interfere with the phenomena of nutrition. But it is requisite that the temperature should be maintained, and to effect this they have devised an ingenious arrangement by which warm water is conducted beneath the vessel in which the membrane is spread out, without interfering with the requirements of the microscope, whilst at the same time fresh fluid is added to the bath itself to compensate for loss by evaporation. It was soon found, however, that the objective became clouded by condensation of the vapour; and to obviate this they connect it with a tube filled with water of the same temperature as that of the bath. Under these favourable circumstances the objects that present themselves to the eye of the observer are both numerous and beautiful. The veins, arteries, and capillaries are visible with surpassing clearness, surrounded in some instances by sheaths containing fat-cells, and in others by cells of peculiar form and character; whilst the epithelial elements, with their characteristic spheroidal nuclei, by which the wonderful connective tissue network of the omentum is covered, is everywhere brought into view. To the original paper a woodcut is appended, which renders the whole arrangement perfectly intelligible, whilst it is so simple that any working microscopist could make the necessary adaptations in a few hours. It is applicable both to air and immersion lenses, but the quarter of Ross has hitherto been found to be the most serviceable.

THE SANITARY CONDITION OF GLASGOW.

THE Rivers Pollution Commissioners have been taking evidence at Glasgow relative to the sanitary condition of that city, and the effect thereon of the impurities of the Clyde. The unhealthiness of Glasgow has long been notorious, and it has been the fashion in some quarters to draw from this fact the inference that a supply of pure soft water is not more conducive to health than a hard water drawn from a navigable river. But good water is only one of the essentials to health, and its influence may be altogether masked by sanitary defects, as is the case at Glasgow. Dr. Gairdner has stated to the Commission what, in his opinion, are the causes of the high mortality of the city. He places first the extreme poverty of a portion of the industrial classes; but that is a feature which we imagine is by no means peculiar to Glasgow. Then he says there is an enormous amount of extremely bad house accommodation; and although he does not think that the ill-health and mortality which prevail are an absolutely necessary result of the "flat" system of living, still the tendency of that system is towards an undue aggregation of the population. The water-supply is characterised as "quite unexceptionable"; while, on the other hand, the watercloset

accommodation is said to be "abominable." It is added that in no other town in England or Scotland is a parallel to be found with some of the evils existing in the worst parts of Glasgow. In short, Dr. Gairdner's feeling is that nothing will effectually improve Glasgow except destruction on the one hand, and reconstruction on the other. On whatever other points sanitarians may differ, there is a remarkable concurrence of opinion among them as to the primary need of improved house accommodation for the lower classes.

THE PHARMACEUTICAL CALLING.

THE aims and aspirations which should animate the rising pharmaceutist were admirably set forth in a spirited introductory address by Mr. Schacht, delivered at the Pharmaceutical Society on the 5th inst, and which was as free from cant as it was pregnant with wholesome truth. After speaking especially of the enthusiasm of numbers associated for a common object, the influence of method and methodical training, and the contact of earnest and able teachers, as so many agencies favourable to the sustentation of the good resolves of the student, Mr. Schacht proceeded to urge upon his audience that the pharmaceutical body has a life to live in relation to the world which imposes obligations as constraining as those which relate to its own members. The gathering together of so many devotees to pharmacy, at the opening of their sessional work, he interpreted as a declaration of their homage to science itself, and a recording of their conviction that, although their range of duties may at times include matters that savour of privileges, of trade, and even of private interest, yet that pharmacy is absolutely and verily a branch of pure truth. The pharmaceutical body is no doubt increasing its influence, because it is steadily elevating the standard of the acquirements of its members. There are many matters of pharmaceutical administration in which the public are looking for the initiative to be taken by the pharmaceutists, and they will increase or diminish the influence they possess, in direct proportion to the desire which they show to make their calling less of a trade than a scientific pursuit, and to sink minor differences and personal considerations in the furtherance of the public good. We will instance the much-debated matter of the storage and keeping of poisons as a case in point in which we hope the expectation of the public will not be disappointed. The pharmaceutical body may anticipate no little degree of increased confidence if it will meet the question in the spirit which Mr. Schacht describes as that most desirable to be exhibited by them in their ordinary dealings with the community.

HEALTH OF CHILDREN IN DISTRICT SCHOOLS.

So much has been said in favour of the healthiness of district schools that we have been repeatedly taken to task by their supporters for maintaining the impossibility of congregating masses of pauper children under one roof and one system of routine, without serious consequences to their general health. Now and then, however, the truth comes out. The guardians of the Kingston Union send their children to the school at Anerley, where it is stated that there are at present 834 children, of whom 120 are in the sick wards. The Poor-law Board have joined the parish of St. Mary Abbott's, Kensington, to the school, and the guardians of Kingston object to any further addition to the numbers now provided for, on the ground that it is undesirable that so large a number of children of the pauper class should be congregated together, either on the score of economy, or, what is still more important, the health and well-being of the children. They affirm that amongst the poor of the Kingston Union there exists a deep feeling against their children being sent to the school, on account of the deplorable state in which many of those who have been sent there healthy and strong have returned to their homes and the neighbourhood after a few weeks' stay at the school. And after numerous complaints made to them, the guardians state, as the result of their inquiries made into such complaints, that the poor have good ground for them. The guardians in consequence have given, and do frequently give, out-door relief, rather than incur the risk of sending the children to the school. Thus is our statement confirmed. The mortality of district schools is not likely to be heavy if the sick are continually removed by their relations or the guardians; and a low mortality, even if that were proved, would be no evidence whatever that the evils of overcrowding do not result; whilst it is certainly easy to inflict upon the constitutions of the young numerous and serious injuries which do not terminate immediately in death.

SURGERY OF THE WAR.

AMONG various items of intelligence, we have been furnished by correspondents at the seat of war with the following facts bearing upon the surgical history of the campaign. As our readers are aware, provision was made on a truly stupendous scale by the Germans for the accommodation and treatment of the wounded soldiers. Not only have the various civil and military institutions been utilised by the Government, but an immense number of temporary hospitals have been erected to meet the emergencies of the war. A correspondent who had recently visited the Prussian lazarets at Floing and Douzy, informs us that the former are under the immediate superintendence of Professor Stromeyer, while the latter are presided over by Professor Thiesse. The patients are largely accommodated in wooden huts, roughly built upon the Crimean model. The wounded have, generally speaking, done extremely well in these temporary structures. Conservative surgery was being practised on a large scale, and the resections were attended with a very fair, although not a large, measure of success. According to the German system, the field hospitals move with the troops, and this necessitates that the wounded should be transported with the least practicable delay to other hospitals in the rear, and at the base of operations. The frequent and long transport of wounded soldiers from the frontier to the interior, however essential in a military aspect to the successful conduct of a campaign, is necessarily attended with some great disadvantages to the wounded. This and their very defective nursing arrangements have probably contributed to the failure of a considerable number of operations. A correspondent, writing from the neighbourhood of Sedan, states that he had heard of thirty-four cases of amputation at the knee-joint by the German surgeons, all of which had proved fatal, whereas those of the thigh had done remarkably well—much more so than had been the case in 1866. There has been remarkably little hospital gangrene, but pyæmia made its appearance in all sorts of cases and under the most favourable circumstances—in small wards and houses as well as in the larger and more crowded hospitals. The weather has been, on the whole, temperate, and the occupants of huts and temporary edifices admitting the freest possible ventilation have hitherto had no reason to complain of the cold, and the cases treated under these circumstances have been comparatively exempt from pyæmic disease. One great advantage connected with the fact that the hospitals have been constantly taking up new positions is this: that no opportunity has been afforded for the ground or atmosphere to become tainted with the dis-

charges or excretions from the wounded. The rapid distribution of the patients in the interior by the various lines of rail and other means of transport has unquestionably tended to avert many evils, notwithstanding that it has been attended with a good deal of discomfort and pain to the wounded.

ON METHOD OF STUDY IN THERAPEUTICS.

DR. RICHARDSON'S introductory lecture on the 4th instant related to the method of research in therapeutics. He put the question whether the physiologist could now follow the chemist with success, and study the action of medicines by the chemical and physical qualities of medicinal substances? Accepting the affirmative on this point, the lecturer proceeded to indicate the steps of inquiry. He dwelt firstly on the subject of basic elementary composition of a compound, and of the changes in action incidental to change of composition. Next he dwelt on physical qualities as modified by conditional material state, by vapour density and boiling-point, in cases of vapours, by specific gravity and by solubility in blood. From this he passed to the consideration of chemical stability, and showed that some medicines undergo direct change within the body, while others are unchanged: iodide and chloride of potassium were thus adduced in respect to the difference of their action in producing artificial cataract. The action of different agents on different structures of the body was also defined; and the peculiarities of animal organisms themselves in relation to the influence of different medicinal agents were pointed out.

The concluding part of the lecture was devoted to the consideration of nitrite of amyl, the ethylates of sodium and potassium, and the triethylic and trimethylic ethers. Special attention was directed to the ethylates, which promise to prove of great value as rapidly acting caustics.

A CORONER ON POST-MORTEM EXAMINATIONS.

THE question of the legality of making post-mortem examinations in hospitals without the direct assent of the relatives of the deceased person, is about to be decided by the magistrate at the Lambeth Police Court. In the meantime, a new phase of the same difficulty has turned up in Newcastle; and there it is not the friends but the coroner who has fallen foul of the medical authorities of the infirmary for making a post-mortem examination without his order. Mr. Coroner Hoyle is reported in the *Northern Daily Express* to have thus delivered his legal mind to the house-surgeon:—

"The coroner said he would have to be very careful in the future, because he thought it was an indictable offence to make the post-mortem examination; and if he caught him [the house-surgeon] at it again, he would take care he did not get off so easily. He did not mean witness individually, but the authorities at the infirmary. The coroner, in addressing the jury, said the system of making post-mortem examinations without the sanction of friends and relatives was something that ought not to exist in an institution of the kind. Many friends of his belonging to the Roman-catholic Church had been very much distressed at it; and, on one occasion, a riot was nearly occasioned by it. He had found that post-mortem examinations had been made very frequently indeed without his order, and it was a practice which those who conduct the affairs of the infirmary should put a stop to."

We entirely demur to the learned coroner's view of the law and his duties, and beg to assure all officers of hospitals that the coroner has no power to *forbid* a post-mortem in any case, though he has the right to *order* one in cases in which he may intend to hold an inquest. The only reason why a coroner's order is ever waited for is that the medical man may be secure of his fee; but as in the case of persons who die within charitable institutions no fee is ever granted, there is no necessity for any delay.

At another portion of the inquest the coroner informed Dr. Philipson, who politely apologised for having unwittingly transgressed the law in ordering the post-mortem, "that it is unlawful, whether there is an inquest or not"; and subsequently remarked, sententiously, "these investigations do good, for they teach people the law." Will the learned coroner be kind enough to refer us to the statute to which he alludes?

THE CUBIC SPACE FOR PAUPERS IN WORKHOUSES.

AFTER the lapse of nearly four years the labours of the Cubic Space Commissioners approach to a practical result. Mr. Goschen has issued a circular to the metropolitan boards of guardians, in which he informs them that they will be entitled to the repayment from the Common Poor Fund of the sum of 5*d.* per day for all the inmates of workhouses over sixteen years of age, provided that the amount of cubic space laid down by the Commissioners shall as soon as possible be given to the various classes of inmates. The sick must have a dormitory space of 850 feet; lying-in women, and cases of an offensive character, 1200 cubic feet each; infirm and aged persons confined to the same room day and night, 700 cubic feet; the same, if they can leave their rooms, 500 cubic feet; and able-bodied persons, 300 cubic feet. A wonderful change will have to take place in many workhouses before this amount of room will be secured. In many of them the number of inmates will be required to be reduced one-fourth, and in some still more; but Mr. Goschen hints that considerable leniency will at first be shown to those boards who are preparing to meet the difficulty by erecting new buildings. We hope this will not give rise to complications; it would probably have been wiser to postpone the date, and so treat all alike.

This is perhaps one of the greatest improvements which has been brought about by the labours of our first Commission; and although here and there abuses of the gravest kind still remain to be remedied, there is no comparison whatever between the state of the metropolitan workhouses now and that which obtained six years ago.

SEARCHING FOR BULLETS.

THE ingenuity of surgical mechanicians has been greatly exercised, since the commencement of the war, in endeavours to improve the means at the disposal of surgeons for discovering metallic projectiles when they are buried in the tissues of the human body. When a ball or a fragment of a shell has taken a tortuous course through soft parts, and still more when it is buried in bone, or among the bones of the wrist or ankle, the difficulties of the surgeon are often very great. The case of Garibaldi and the porcelain-tipped probe of Nélaton will be fresh in the recollection of our readers; and military surgeons have often been compelled to remain long in doubt as to whether a bullet was present in a wound or not, and also as to the metallic or non-metallic nature of some buried substance that could be felt by a probe. A French surgeon, Dr. Lecomte, has contrived an instrument by which an uncertainty of the latter kind may generally be solved. It consists of a long and slender pair of canula forceps, which form a blunt-pointed probe when closed. By withdrawing the canula the fine blades separate by their elasticity, and embrace a portion of the substance against which they are pressed. Each blade has a termination like that of gouge forceps, and when the two

are drawn back within the canula they bring away for examination some small portion of any material or tissue which they may have enclosed.

The well-known instrument maker, Mr. Krohne, has applied a galvanometer, not larger than a watch, to determine whether any buried substance is or is not metallic. Conducting cords connect the galvanometer with common bullet-forceps, and the needle is deflected as soon as any metallic substance is grasped between the blades. For wounds which are too narrow to admit of the introduction of forceps, he has contrived a sound of caoutchouc, containing two insulated wires, which project a short distance beyond its extremity. The external ends of these wires are connected with the galvanometer; and the needle is deflected as soon as both the points touch metal. At Dr. Richardson's lecture, last week, he exhibited Mr. Krohne's instrument, and tested its powers upon rings and coins held in the hands of some of the audience.

FUNGOUS FOOD.

THERE was a show of fungi last week at the Horticultural Gardens, which was attended by a large number of visitors. Many of these doubtless learnt for the first time that the swift-growing ephemeral vegetation familiar to them in the autumn woods deserved a very careful recognition, and found that their merits could not be exactly summed up by dividing them into "mushrooms" and "toadstools." According to Badham, there are thirty species of esculent fungi in England. The only kind which we ordinarily eat, the *Agaricus campestris*, is thrown away in Italy as unfit for food; and we, in our turn, kick down and destroy the *Agaricus prunulus*, the most delicious of all, and the kind to which the French title "mousseron" (whence our word "mushroom") was originally applied. Nor does the *Agaricus oreades*, the "champignon," so extensively eaten all over the European continent, fare much better with us. Ninety-nine times out of a hundred it is denounced as a toadstool, and shivered by a blow of a stick, or crushed under heel with disgust. There must be many tons of good, nutritious food thus wasted annually in England, for want of the knowledge to discriminate the esculent from the poisonous fungi. When we remember the weary and profitless lectures often delivered by professors of botany to medical students, it seems very wonderful that no attempt is ever made to enlighten the class upon what would really be useful information—the selection of esculent fungi. If medical men generally were acquainted with the subject, they might readily spread this knowledge throughout the community, and receive the thanks, not only of the poor, who would be the gainers of many a cheap and savoury meal, but of the gourmand, whose existing resources for palatal enjoyment would be somewhat largely increased.

GUILDFORD WATER-SUPPLY.

WHETHER the recent outbreak of fever in Guildford is or is not traceable to the distribution of contaminated water, the fact that the source of the existing supply is objectionable as a matter of taste, if nothing more, seems indubitable. The long and able letter of Mr. Henry Taylor, in the *Surrey County Times* of Saturday last, is very conclusive as to the theory of causation of the outbreak, and equally so in reference to the unfitness of the existing well for supplying water for human consumption. On this latter point additional evidence has, it seems, just turned up. The *County Times* states that during last week an old drain-pipe for a number of closets, running into the Wey near the town well, was opened, when it was found that this "pipe" was "nothing but a few bricks and stones laid loosely together, through which, and the soil around, the filthy sewage was evidently working its way into the well." To talk of the "immediate purification of the well" because a proper pipe has been laid, is a mistake. The mischief which has been going on for an indefinite period cannot be rectified in a day. Has the well been thoroughly cleaned out since the discovery of this drain was made? If not, the Guildford people, who have been drinking diluted sewage ever since this leaky drain has been in use, will continue to do so until, in the course of time, all traces of the sewage have disappeared, or the well has been abandoned for a source less open to objection.

SCARLET FEVER IN LONDON.

THE scarlet fever epidemic continues to increase in fatality, the deaths in London last week from that cause being 21 in excess of the previous week's return, and the highest number registered during any week since December last. The mortality is greatest in the South, North, and West groups of districts. "The disease," says the Registrar-General, "appears to have settled down like a dark shadow over the Battersea sub-district of Wandsworth," where, out of an aggregate of 113 deaths registered from all causes during the last four weeks, no less than 53 resulted from the one cause, scarlet fever, alone. During the thirteen weeks ending 1st October, 1674 deaths from scarlet fever were registered in London. Relatively to the population these deaths are equivalent to an annual mortality of 21 per 10,000 living, the distribution of the fatality being represented by a corresponding ratio of 27 per 10,000 in the Western, of 23 in the Northern, 18 in the Central, 11 in the Eastern, and 23 in the Southern districts of the metropolis.

OBSTETRICS IN BIRMINGHAM.

THE governors of the Queen's Hospital have determined, on the unanimous advice of their medical staff, to put an end to a strange anomaly in the Birmingham school. At present, no provision whatever exists in the midland metropolis for imparting to the large class of medical students assembled there a practical knowledge of obstetrics. A special officer is shortly to be appointed to perform that duty; and there can be no doubt that, if the appointment be well made, and the department efficiently organised in every respect, the Queen's Hospital will be greatly benefited as a charity and as a school. The first condition is, that the best man be chosen for the office.

NEW MEDICAL STUDENTS.

WE anticipate that the total number of gentlemen commencing their studies at the various medical schools of the metropolis will this year be found to be somewhat above the average of the last two or three years. From official communications that have reached us we learn that, up to Thursday morning, the number of entries at Guy's was 112; at Bartholomew's, 82; at University College, 81; at St. Thomas's, 46; King's College, 35; St. George's, 26; the London Hospital, 26; Middlesex, 16; and Charing-cross, 9. The registrar of St. Thomas's informs us that in addition to the first-year students above given, 18 other gentlemen, some of them foreign graduates, have entered at that school since the October registration of 1869. It will be seen, therefore, that Guy's takes the lead of all the schools in a very decided manner; University College has all but tied St. Bartholomew's this year; and St. Thomas's shows a decided increase, explicable, no doubt, from the fact that the transfer of the school to the new hospital is near at hand.

THE CLINICAL SOCIETY.

IN announcing the first meeting of this Society, which takes place this evening (Friday), we think it proper again to remind members of the need for brevity in their communications. The Clinical Society is young, active, and industrious, and numbers among its members most of the best physicians and surgeons, senior and junior, in London. It is not beyond the bounds of possibility that the junior may set an example to the senior societies in the condensation of cases, so that we may glean as much knowledge as possible in as little time as is practicable, due regard being paid to the professional proclivities of all concerned.

THE BUCKS GENERAL INFIRMARY.

THIS institution has received a legacy under the will of the Rev. Christopher Erle, an old supporter of the charity, by which a "sanatorium" or winter garden, for the benefit of the patients, will be added to the infirmary. A passing difficulty arose in the appropriation of the fund owing to the fact that the testator had indicated the south-west angle of the building as the most suitable spot, whereas the architect, Mr. Brandon, and the governors at large, thought the northern side would be a more advantageous site. The bequest was complicated by a reversion being given to the Royal National Lifeboat Institution, in case it was not accepted by the governors of the infirmary, and it became a question whether a change of site for the sanatorium would render void the bequest; however, the Lifeboat Institution has waived all claim upon the legacy, and the infirmary will, therefore, shortly enjoy a novel and, we hope, a useful addition.

THE EMIGRATION OF CHILDREN TO CANADA.

MISS RYE has just returned for a fresh batch of children. She has found homes for nearly all who went with her in July. With one exception, there was no sickness on the passage out, and the appearance of the children who were taken out in the spring presents a remarkable contrast to that of the fresh arrivals, and proves what good food, fine air, freedom, and kindly treatment are capable of doing for children whose hitherto wretched homes have been a parish workhouse. Two hundred homes are at this moment waiting for a fresh batch of children. Miss Rye proposes to sail on the 18th instant.

THE CROPS ON THE CROYDON SEWAGE FARM.

IT having been stated that mangold-wurzel could not be profitably produced upon the Croydon sewage farm, and was only tried for scientific purposes, the *Croydon Chronicle* states that the crop this year will be forty tons an acre, which, considering the unusual drought, is quite sufficient to encourage a repetition of the experiment.

THE late Mr. Briscoe, M.P. for Surrey, has by his will made the following bequests to medical charities: Victoria Hospital, Surrey County Hospital, Surrey Dispensary, King's College Hospital, London Fever Hospital, St. Mary's Hospital, St. Mark's Hospital, and Cancer Hospital, each £1000; to Middlesex Hospital, Consumption Hospital (Brompton), Convalescent Hospital (Weybridge), City Orthopædic Hospital, and Hospital for Sick Children (Great Ormond-street), each £500.

AT the quarterly meeting of the Directors of the Naval Medical Compassionate Fund, held on the 11th inst., Sir Edward Hilditch, Inspector-General, in the chair, the sum of £85 was distributed among the various claimants.

THE first meeting of the session of the Association of Medical Officers of Health will be held at the Scottish Corporation Hall, Crane-court, Fleet-street, on Saturday, Oct. 15th, at 7.30 P.M., when an address will be given by the President, Dr. Druitt, "On the Sanitary Topics of the Day." The following papers will be read during the session: — Robert Rawlinson, Esq., C.B., "On Sanitary Progress from 1848 to 1870"; by Dr. Spencer Cobbold, F.R.S., "On Parasitism in relation to the Public Health"; by Dr. Crace Calvert, F.R.S., "On Fermentation and Putrefaction, and their relation to Fever"; by Dr. Ballard, "On a localised Outbreak of Typhoid Fever in Islington in July, 1870"; and by Dr. Letheby "On the Quality of the Water-Supply of some of the large cities and towns of England, in relation to their Sanitary Condition."

A SUBSCRIPTION has been entered upon in order to present Dr. Dudfield with a testimonial on his resigning the office of Hon. Secretary to the Poor-law Medical Officers' Association, which office he has discharged for four years. Mr. Benson Baker, 42, Grove-road, Regent's-park, has consented to act as treasurer to the "Dudfield Testimonial Committee," and will receive subscriptions.

THE first meeting of the session of the Medical Society of London will be held on Monday next, October 17th, when the President, Mr. Gay, will deliver an address "On Surgical Art and its Limitations." Dr. Andrew Clark will afterwards read a paper entitled "A Practical Account of Basic Disease of the Lung."

THE number of deaths registered from small-pox last week in London was unusually large—namely, 27; 8 of the fatal cases were returned as having occurred in the Small-pox Hospital during the week.

THE Wandsworth Board of Works, having had the impurity of the water supplied by the Southwark and Vauxhall Company represented to them by their medical officers, have decided to ask for a Board-of-Trade inquiry on the subject.

MR. GOSCHEN has consented to receive a deputation of the British Medical Association and the Poor-law Medical Officers' Association, on the subject of the registration of disease, on Monday, the 17th inst., at 2 o'clock.

DR. BURNEY YEO has been elected President of King's College Medical Society for the ensuing year.

DISEASES AMONG ANIMALS.

No. III.

FOREIGN CATTLE MARKET.

OUR two articles on "Diseases among Animals" will have been strangely defective and unsuccessful if they have not forced upon the minds of our readers some reasons at least for the establishment of a Foreign Cattle Market. At present the whole of London presents the anomalous aspect of a place virtually declared to be an "infected place," without cattle plague or sheep-pox existing therein; whilst the Act of Parliament, on which all our regulations in respect of animals is based, only authorises a place to be declared an "infected place" in localities where cattle plague or sheep-pox exists. And when it is remembered that the area included within the Metropolitan District extends to Stamford-hill and Highgate on the North; to Cricklewood, Barnes, and Wimbledon on the West; to Tooting, Anerley, and Sunderidge on the South; and nearly to Abbey-wood

on the East, it will easily be understood that cattle-owners are somewhat hardly dealt with in the existing state of the law, which only permits the removal of cattle from the Metropolitan District under certain conditions (which in many cases are felt to be vexatious); the principal ones being that the cattle shall have been eight weeks in the owner's possession, and that they shall be twice visited by an authorised inspector, with a distance of twenty-eight days between each visitation. The cordon round the district is watched by the Metropolitan Police, and an expense is entailed on the public, for this service alone, of more than £11,000 per annum!

The Act of Parliament calls on the City authorities to provide a waterside Foreign Cattle Market before the 1st of January, 1872; and, should they fail to do so, the protection they at present have from competition under Section 15 of the Metropolitan Market Act, 1857, which forbad any new market to be opened within seven miles from St. Paul's Cathedral, ceases to be in operation, and any local authority or person can establish a market in opposition to the market the interests of which are vested in the City authorities. The Privy Council have not been slack in their action in this matter. Months ago the Corporation was applied to, and the Market Committee were directed to select a site for a Foreign Market, which should receive all animals coming from scheduled countries, and thus relieve the metropolis from the restrictions which have been so excessive and injurious alike to sellers and consumers, and which have tried the tempers and the pockets of the ratepayers so severely. But the City coach is a slow one; it drives with great deliberation, and stops often on the road to refresh its passengers. In time it reached the end of its first stage. Plans of various sites were submitted to the Government, and the one was pointed out which was deemed most suitable by the magnates of the Mansion House. It will be as well to state here that the power conferred on the Government was of this character: they were to have nothing to do with the *selection*, but could put a veto on an undesirable site; in fact, theirs was the power of *objection*. In this case, after investigation and deliberation, they came to the conclusion that the site chosen by the City—Dedman's Dock, east of the Deptford Dockyard—was in some respects insufficient to meet the requirements of the trade and public, and they exercised their prerogative of vetoing the City proposal. Time passed by. The delivery of a Guildhall idea is probably followed by a period of mental debility; just as Nature, after parturition of a more material character, avenges herself by a period of physical prostration. How much more, then, when the aldermanic idea has been *prematurely* brought forth by *pressure* or other abnormal disturbances, must not its production be followed by a severer and more lengthened reaction. At length the aldermanic mind had, perhaps, been brightened and refreshed by provincial tours and seaside summer sojournings, and they digested a new proposal, made by one of the least plethoric of their brethren; so they proposed to the Government that the Deptford Dockyard, which had ere this passed into private hands, should be the site of the new waterside Foreign Cattle Market. The Government promptly accepted this proposal, subject to certain reasonable conditions; and the public, with a sanguine good-nature which did more credit to their amiability than their sagacity, fondly hoped that last week's Common Council meeting would have settled this *vexata quæstio*—that the proposed site would be accepted by acclamation. But aldermen and City councillors are not as other men are. That little affair, too, of Mr. Rutson—that *ingenui vultus puer, ingenuique pudoris*,—pleasantly titillated the City ear; and the public are still left in ignorance as to where and when the market will exist, and this at a time when rinderpest stalks unchecked and unhindered over the length and breadth of the Continent, and when severe but necessary restrictions in the port of London threaten congestion to trade in animals, and make importers raise the voice on high in the market-place, and denounce the cruelty of all—Government, City authorities, and home breeders—who have not a human—i. e., a pecuniary—interest in foreign cattle trade.

There have been many differences of opinion as to the locality where the new Foreign Market should be erected. Many are of opinion that the squalid districts, Whitechapelwards, should be thought of, and that, for the sake of that side of London, the site should be selected on the north side of the river Thames. Others again object to the Essex side being rendered somewhat more liable to infection, and on that account, and having regard also to the easier access and the less crowded streets and thoroughfares, prefer the south bank of the Thames. We are strongly of opinion that the Corporation will act wisely, and deserve well of their fellow-citizens, if they choose Deptford Dockyard for their new Foreign Market. But meanwhile time goes on, and all are sufferers. The importers are driven about from place to place, with the fear of a new Order of Council ever before them; the home cattle party weep bitter tears over the risk to English animals from what they are pleased to term the inactivity of the Government; butchers take an eager opportunity of increasing their lawful profits; ratepayers assist, though grudgingly, in paying for the police cordon; and last, though not least, foreign cattle are landed, laired, and slaughtered without a due regard to the principles of humanity.

Such is the case as it stands. Let us now see how London will be situated when the new market is in existence. When that time arrives all cattle (and other animals coming in the same vessel with cattle) from scheduled countries will be landed at the market pier, and will not be allowed to leave the precincts of the market alive. The cordon will be removed, and home cattle will have freedom of movement from and into the metropolis. Cattle from unscheduled countries—from countries where there is no suspicion of disease—will, after inspection, be treated as home cattle, will attend the same markets, and so prevent any undue rise in the price of home-bred beasts in the neighbourhood of the metropolis.

Let us see what the position of the country will be as compared with the metropolis. Cattle will be slaughtered within the defined parts of the ports, if they come from infected countries, with this exception, that at Southampton, as at present arranged, store stock can undergo quarantine for twenty-eight days in a place set apart for that purpose, when they become for all purposes home cattle. Places for quarantine can be set apart by Order of Council at other ports; and as, when there is a foreign cattle market in London, Thames Haven will cease to be a defined part of that port, the situation would probably be a good one for a quarantine ground. Cattle from unscheduled countries will be admitted on the same terms as, we have stated, will apply in the port of London; and, by these arrangements, the country will not be entirely dependent on home breeders for store stock. It has been proposed by some, who argue solely in the interest of protection to home trade, that *all* foreign animals should be slaughtered at the port where they are landed; but we can hardly understand that anything short of self-interest could urge a measure so unnecessary and extreme. Messrs. Brown, Jones, and *Robinson* may state in confidential whisperings over their mid-day refreshments that such regulations would not affect home prices; but, since it is a fact that in the week ending the 1st inst., 2115 head of cattle, 965 sheep, and 163 swine were imported into the United Kingdom from unscheduled countries alone—and those numbers would appear to be about the average of such importations weekly,—it would require a greater amount of credulity than can generally be found, even in bucolic minds, to accept their statement that the rigorous measures proposed by the alarmists would be judicious or justifiable. We trust, therefore, that the Government will continue to hold their present position; one of calm neutrality between the conflicting interests of importers of foreign cattle, and those who are personally interested in the home trade; one of watchfulness too, and of readiness to take a not unnecessary alarm should any of those countries which are now free from suspicion of disease become infected. It will be thus, and thus alone, that we shall be at the same time preserved from the perils of the pest, and from the high charges which a too rigid protection would undoubtedly entail upon us.

Cattle plague remains as stated in our last article, except

that it is increasing in the Duchy of Mecklenburgh-Schwerin.

Pleuro-pneumonia now exists in 37 counties in Great Britain; abroad it remains as stated in our last article.

Sheep-pox still exists in East Friesland, and in the district of Stettin. The case in Dutch Friesland reported last week was not in a flock, but in a yarded sheep, and the locality is isolated, so that at present there seems to be no fear of its spreading, or of risking the safety of our importations from the Netherlands.

Foot-and-mouth disease continues about the same, both as regards its area and its averages.

THE NEW EDINBURGH INFIRMARY.

THIS institution, which has given rise to so much discussion as to its site and architecture, was formally commenced on Thursday, the 13th instant, when his Royal Highness the Prince of Wales laid the foundation-stone in presence of her Royal Highness the Princess of Wales, and a numerous assemblage of noblemen, gentlemen, and the public. The grounds on which it stands are about twelve acres in extent, and the exposure is all that could be desired in point of ventilation and natural beauty. To the general description which we recently gave of the building we have little to add. The pavilion system, which has been adopted, secures the free admission of currents of fresh air into the wards; while the pavilions themselves are of two stories, with a reserved room on the ground-floor. The space between the two central pavilions, and fronting the main building, is altogether 176 ft. wide, and forms a fine square. The surgical hospital, a highly ornamental structure, which we have already described, has all its wards cross-ventilated by means of the windows between each bed, and is heated by open fireplaces in the side walls. Each ward, complete in itself, occupies the entire length of the pavilion—that is to say, it is 127 ft. in length, and it also occupies the entire width, which is 18 ft., while the height is about 16 ft. They are divided into two parts, the part next the corridor being used for administrative purposes, and containing a doctor's room, a (so-called) sister's room, a convalescent room, a bath-room, a kitchen, and, finally, a private room for the accommodation of patients who can pay for the luxury. The kitchen, it should be said, is merely for the convenience of the nurses who may have to attend to the patients' little wants which the main kitchen could not promptly or adequately supply. The beds are placed between the windows at intervals of 9 ft. from each other. The surgical hospital has sixteen wards, besides private wards, and contains 260 beds. It is also provided with three reserved wards, containing 48 beds, designed for use when the ordinary wards require to be cleaned or vacated. The medical hospital has fifteen wards, besides private wards, and contains 340 beds, being also provided with four reserved wards, containing 100 beds. In all, the Infirmary contains 600 beds in the two hospitals, exclusive of those in the reserved wards. At the end of each ward are two circular turrets, in which are placed lavatories, &c., communication being cut off by a ventilated lobby 4 ft. 6 in. wide, with windows in both sides for the admission of air. We may add that, for the better isolation of the wards, the floors are laid with concrete arches carried on beams; and, to prevent absorption, the walls of each ward are, internally, furnished with Parian cement, Dutch tiles, or some similar non-absorbing material. Each patient is allowed 2000 cubic feet of space, and 126 superficial feet of air, which, when vitiated, will be extracted by means specially prepared.

Other details relate principally to the administrative department, and these are so well conceived and appointed that there seems every reason to anticipate that the New Edinburgh Infirmary will (in the words of a local paper from which much of the above is taken), prove "one of the healthiest in the kingdom."

Correspondence.

"Audi alteram partem."

NAVAL MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—Although I do not belong to the Naval Medical Service, I possess friends and relatives belonging to it, whose feelings and sentiments I would wish to represent. I perceive another examination is to take place in November, when twenty-five assistant-surgeons are required; but I trust my young professional brethren will withhold their names until several grievances have been redressed. I was glad to see at the last examination, when twenty-five were wanted, only ten could be obtained. No doubt the chief drawback to ship life is, as Dr. Johnson expressed it, the imprisonment, with the chance of drowning; and this alone calls for more pay than that of the other public services to make it equally attractive. The Navy ought also to be, like the Army and Indian Services, a full-pay one; for only a few can make two or three and twenty years good in thirty years' service. If this is not done, the full pay should be increased, so as to make up for this loss of time.

Their lordships have broken faith with medical officers in refusing retirement, as offered by the last Warrant. This no doubt arises chiefly from the difficulty in procuring assistants, but is not the less a breach of faith.

I would also point out to candidates the crying injustice as regards retirement, staff-surgeons being placed on a scale of £50 less than paymasters and chaplains; and only a very few can expect to go beyond that grade, as there are only about a dozen appointments for inspectors and deputy-inspectors; and, after all, a competent retirement is the main thing to be considered.

Finally, I would remind the Lords Commissioners of the Admiralty of their shortsighted and illiberal policy as regards medical officers; for in the event of a war they would find themselves sadly at a loss to get assistant-surgeons. England must in a great measure depend on her navy, and if that should prove inefficient in such an important branch, they will have much to answer for.

I am, Sir, your obedient servant,

JAMES MUNRO, M.D.,
Surgeon.

Vicarlands, Moffat, Dumfriesshire, N.B.

OUT-PATIENT HOSPITAL REFORM.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me a little space in your columns to make an appeal to the profession for some assistance to enable the committee, which was appointed last summer to investigate the subject of out-patient hospital administration, to meet the heavy liabilities it has already incurred, and to prepare its final reports for presentation to a meeting which is intended to be held during the winter session.

It will be in the recollection of your readers that, at the meeting held at 53, Berners-street, in March last, under the presidency of Sir William Fergusson, a committee was appointed to carry out the objects of the meeting, and to report the results of its labours. The committee resolved itself into four sub-committees to work up the several branches of the question; they have held many meetings, have collected a vast amount of valuable information, and each sub-committee has drawn up and printed a report giving the results of its inquiry, and suggesting certain reforms in our out-patient administration. It will be obvious to anyone that work such as this involves a good deal of expense in printing, postage, &c., and it seems hardly fair, I think, that this should be added to the other burdens of the committee, though we are quite willing to bear our share of the expense. In the middle of August I issued to the profession in London nearly 500 reports of the sub-committees, together with a request for some small contribution towards the necessary expenses; the result was a *single donation of five shillings!* Possibly many of those to whom my circulars were issued were at

that time out of town; and I have no doubt they will now be glad to show their interest in the work. I shall be happy to receive any contributions, either in postage-stamps, post-office orders (payable at Vere-street), or cheque; and, with your permission, will acknowledge the receipt in the pages of THE LANCET.

I am, Sir, your obedient servant,

ALFRED MEADOWS,

27, George-street, Hanover-square. Hon. Treasurer to the Committee.

"INSIDE PARIS."

To the Editor of THE LANCET.

SIR,—I am sure you, in common with the public generally, and military men in particular, will have been interested in learning that Paris is impregnable. A *Surgeon*-Major has pronounced an opinion to that effect, and we may confidently expect that the King and Crown Prince of Prussia, with Von Moltke, Bismarck, and the German army, will raise the siege immediately they learn it. Foolish people supposed that the object of sending military surgeons to the belligerent armies was that they should obtain information on medical and sanitary matters that might be available in any future campaign. The Surgeon-Major's sphere of knowledge is not limited by surgical, but embraces military operations. Thanks to his presence in Paris, the Germans will be able to form some estimate of the amount of provisions in the beleaguered city, and the British public will have discovered that a prophet is not without honour, save in his own country. A word in conclusion: Who is responsible for the publication of these letters?

I am, Sir, your obedient servant,

October 12th, 1870. "OUTSIDE PARIS."

DOWN THE RHINE.

(FROM A CORRESPONDENT.)

ON leaving Strasburg, the crowds of visitors made it extremely difficult to find a place in the train. However, I got to Baden-Baden late at night. Here there were as many wounded as visitors; but as the doctors and inhabitants have nothing else to do, the wounded do not lack anything. At Heidelberg many houses have been converted into hospitals, and people with the red cross upon them are met at every step. Here at least surgical instruments could not have been required, for, on passing up the street, a shop was seen in which was displayed an assortment almost equal to that of Messrs. Weiss's in the Strand. At Darmstadt a train of forty carriages was halting on its way to Metz, for the refreshment of the staff. It had been going backwards and forwards between Berlin and Metz for some time. There were 400 mattresses for the wounded, and the carriages were fitted up for their reception. There was a complete kitchen, with a cook in his white cap and apron. There was a staff of medical officers, who had a sort of saloon; and in a first-class carriage were the well-known white caps and dark dresses of the nursing sisters. Besides there were stores of all description, and numerous attendants. They expect to return loaded in about four days. In Mayence, Bingen, and other towns above Cologne, the pressure for hospital accommodation appears to have greatly decreased during the last five weeks, many wounded having sufficiently recovered to go home; and the fresh cases are either treated near the seat of war, or are conveyed to Berlin or to their homes. I heard that the tent hospital established by Mr. Simon and Dr. Thudichum does not appear to have been the success expected. For some weeks several of the medical staff were absolutely idle. The arrival of the tents was greatly delayed, and the bedding went astray; and although some of the staff went to the front, their services do not appear to have been important. The fact is that there has been no overwhelming pressure since the great battles before Metz in the middle of August, and the German surgeons have since then been able to overtake the work without foreign intervention. Nevertheless the tent hospital is admirably set up. It consists of twenty tents, in a double row of ten. Each tent is spacious, and is provided with eight beds. The flooring is raised. A trench runs round, and the means of warming and ventilating are excellent. There is a Moule's earth-closet in each, and all necessary furniture and dressings. There is telegraphic communication between the wards and the attendants' room, as also with the hotel near, where the medical staff is lodged, and the culinary department carried on. The water is pumped from the Rhine, and is filtered for the use of the patients. The operating-shed is large and light, and the supplies of surgical instruments ample. Enormous quantities of every sort of material used in hospital have also been sent, including dressing-gowns and slippers, and one inventory included pots of jam, a chest improver, and two opera cloaks. When all was ready the real difficulty commenced. Patients could not be found. Some half-a-dozen bad cases were removed from the local lazaretto. Mr. Simon operated upon them. Two died of pyæmia, probably contracted before admission, and the other four are doing well; but since then the surgical cases have been of slight and secondary character, and the chief admissions have comprised soldiers suffering from typhus and typhoid fever and dysentery. At present the tents are about half full. The fact is, that Bingen is too far removed from the actual seat of war to be made available for the treatment of primary wounds and injuries. The graver must of necessity be treated at the front; and when once they are fit for removal in the ambulance train just described, it is quite as easy to take them to Berlin as Bingen. The consequence of this is, that the surgical staff at Bingen has been greatly disappointed. Mr. Simon has gone on to Italy on holiday, and several others have returned home. There would appear also to be a considerable amount of jealousy on the part of the German surgeons, and it is possible that the talk about conservative surgery, and the laudation of English modes of treatment, may have aroused some feeling of this sort. But it should not be forgotten that both surgeons and wounded soldiers are certain to prefer native modes of treatment. When, for example, an English surgeon insists upon administering port wine to his French and German patients, he offends all their prejudices; and if English surgeons really desire to be well received by foreigners, they must make up their minds to discard a good many English notions in which they have been educated. At Bingen station the train took in a corporal and twenty-one men, who had just arrived from the seat of war. Six of the men had been more or less wounded, but not dangerously, and all the rest were returning home on account of illness contracted in the camp. Little has hitherto been heard of the diseases peculiar to armies in the field. But if this corporal is to be believed, and the probability is that all he said was true, they are as rife and fatal to efficiency as ever. Indeed, it is impossible to be otherwise. He stated that it rained for a week almost continuously, and, as the soldiers have no tents, it was almost impossible to lie down or sleep. There might be a small house, capable of holding fifteen or twenty persons, for the joint use of several hundred men. It therefore came to their turn to get a good night's rest once in eight or ten days. The men suffer fearfully from rheumatism; indeed, that was the disease with which most of the men in the train were affected. That was not by any means the worst. The water was dreadful, and produced disorders of the bowels and dysentery. Fever was also prevailing. All the men expressed themselves as delighted to be going home. The corporal himself had served his time, and was discharged. He had been through the Schleswig-Holstein and Austrian campaigns, which he said were trifles as compared with this. His regiment crossed the frontiers 1000 strong, and of that number there are not more than 400 now before Metz. This accounts for a statement made in the *Daily Telegraph* that a regiment was practically exterminated by the loss of 300 men. At all the stations down the line these men were liberally supplied with coffee, bread, sausage, beer, wine, cigars, &c., and with such profusion that these luxuries were afterwards shared with the civilian passengers. None of the men had ever seen the Rhine before, and although they were so liberally supplied, they seemed to take everything offered them as a matter of course. At Brussels, the excursion to Sedan is becoming almost as popular as that to Waterloo; and at present visitors come back loaded with relics, which probably have the advantage of being more genuine than those which are purchased at the older

battle-field. From the reports given, the sick and wounded have all that is required; indeed, it seems unnecessary to send more stores there, since there are many bales of bandages to spare. Brussels is itself full of ambulances, and convalescent French soldiers are met at every corner. No time was left to visit them; but there can be no doubt that, amidst thousands of their countrymen, and the kindly Belgians, they have all that they can need.

THE COUNCIL OF THE COLLEGE OF SURGEONS.

THE quarterly meeting of the Council of the College of Surgeons was held on Thursday, the 13th inst., when the usual routine business was transacted. At this meeting the letters from Sir W. Fergusson and Mr. Quain, resigning their offices of examiner, were received and read; and some attempt was, we understand, made to shake Sir W. Fergusson's resolution on account of his occupying the president's chair. That gentleman, however, stated that he had not taken the step without due consideration, and honourably adhered to his expressed determination.

Thursday, the 27th inst., was then appointed for a special meeting of the Council to fill the three vacant examinerships; and, in accordance with a recent resolution, the names of several gentlemen were formally brought forward as eligible for the posts, but with the understanding that no public mention of them should be made—a resolution to which we are happy to bow. *Apropos* of this, it should be mentioned that a letter was read from Mr. Curling, requesting that, as he had taken an active part in endeavouring to separate the examiners in surgery from those in anatomy and physiology, his name might not be brought forward for an examinership on the present occasion, but without prejudice to future elections. This redounds greatly, we think, to Mr. Curling's credit, more especially as he is now second in order on the Council below the Court.

Obituary.

PROFESSOR MATTHIESSEN.

THE melancholy death of Professor Matthiessen, of St. Bartholomew's Hospital, is but another example of the over-strain to which men of science are exposed. The highly sensitive organisation of a philosopher is ill able to bear that self-concentration which devotion to one class of studies leads to; and, often when too late, friends remember passing symptoms of eccentricity and moral madness, which, if kept in check by a freer mingling with the world, might have passed away. Dr. Matthiessen's death is a great loss to St. Bartholomew's Hospital and to chemical science, as the following epitome of his labours will serve to show.

The Council of the Royal Society only last year awarded Dr. Matthiessen the Royal Medal for his researches on the electrical and other physical properties of metals and their alloys. His earliest published researches related to the preparation of the metals of the alkaline earths. Having succeeded in perfecting methods for the production of these, he proceeded to institute a far more complete examination of their physical properties than had previously been attempted. The results were published in a series of nine papers in the *Philosophical Transactions*. They embraced the determinations of the specific gravities, the expansion due to heat, the thermo-electric properties, the electric conducting power, and the effects of temperature upon the electric conducting power. The laws deduced from the results of Dr. Matthiessen's electrical experiments are now in constant use by telegraphic engineers. The causes of the great variations observed in the electric conducting powers of commercial copper were first elucidated by him, and an important report was made by him on this subject in 1860, to the Committee appointed by Government to inquire into the construction of submarine telegraph cables. Closely connected with this branch of his researches were the investigations which Dr. Matthiessen carried out for the Electrical Standard Committee of the British Association, of which he was one of the most active members. The resistance-coils issued by that Committee, which have been very generally adopted as standard instruments, are all constructed of an alloy of platinum and tin, which, after a long series of experiments, Dr. Matthiessen recommended as specially fitted for that purpose. He laboured most perseveringly in the preparation of iron in a chemically pure condition, and in quantities sufficient to admit of the attainment of thoroughly trustworthy results in the study of the physical and chemical properties of the pure metal and of its alloys. His researches in this direction had been recently crowned with success, and the method of producing pure iron which he had elaborated promised to be fruitful in interesting and important results in the hands of himself and the other chemists with whom he was associated in the inquiry. The substance known as "papaverine," hitherto regarded as a distinct organic base, was the subject of Dr. Matthiessen's recent study, and promised to yield results of considerable interest. In presenting to him the Royal Medal, the President of the Royal Society paid him a well-deserved eulogium, characterising Dr. Matthiessen's researches as distinguished as well for their diversity as for their uniformly complete and trustworthy character.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Oct. 6th:—

Rickards, Edwin, University College Hospital.
White, Barrington Sayer, King's College.

As Assistant in Compounding and Dispensing Medicines:—

Clark, Walter Beales, Leicester.

The following gentlemen also on the same day passed their first professional examination:—

Bracey, Herbert Richard, Birmingham.
Ransford, Thomas Davis, Guy's Hospital.

PATHOLOGICAL SOCIETY.—The following specimens will be exhibited on Tuesday evening next:—Mr. Spencer Watson, Glioma of the Retina; Mr. Christopher Heath, Aneurism of the Aorta; Dr. Crisp, Hair from a case of General Alopecia; Mr. Morris, Renal Cyst.

MEDICAL CLUB.—The annual general meeting was held on Wednesday last, Sir W. Fergusson, Bart., in the chair. After the ordinary business had been transacted, the question of removing the Club to new and larger premises was discussed, and Dr. Lory Marsh stated that he had obtained the refusal of the lease of the house in Pall Mall East, at present in the occupation of the Union Bank. The outlay required for purchase of lease, furniture, &c., is estimated at £5000, and it is proposed that the sum should be advanced by the members in debentures of £25 each, bearing interest at 5 per cent., and secured by a conveyance of the lease, furniture, &c. to trustees. The present members would be continued upon the same terms as are now established in the Club—£5 5s. for town, and £3 3s. for country members; and any new members joining before 1st January next would be admitted on the same terms and the payment of the present entrance fee of £8 8s. After this year, the entrance fee is to be £10 10s., and the annual subscription to be uniformly £5 5s. for all members at home. It is believed that, when once finally settled in a suitable and commodious building, the Club will rapidly develop into one of the best in town.

THE STATE OF CANNES.—Dr. de Valcourt, practising in this pleasant winter residence, has written to us in order to dispel the apprehensions created by statements in *The Times* of the 17th ult. He says: "At Cannes there has been no red flag hoisted, no Committee of Public Safety appointed, no police agent imprisoned, no malefactor set at liberty, no threatening of civil war. Though the *maire* has been changed, the tranquillity of the country has not been in the least disturbed, and we are as quiet and peaceful as ever."

THE "Journal des Débats" of September 30th states that "the general mortality of Paris remains stationary; and putting aside small-pox, which still causes many deaths, there is no epidemic at present. Typhoid fever, which usually prevails at this season, now causes but few deaths, and the mortality from diarrhœa is less than the ordinary amount."

QUEEN'S UNIVERSITY IN IRELAND.—On Wednesday, the 12th inst., a meeting of the Queen's University was held in St. Patrick's Hall, Dublin Castle, for the purpose of conferring degrees, and awarding honours, exhibitions, and prizes to the successful students of the three Queen's Colleges. The Right Hon. Sir Maziere Brady, Bart., Vice-Chancellor of the University, presided, and his Excellency Earl Spencer took an active part in the proceedings.

THE FORMER MEDICAL EXILES FROM ROME.—Through the changes which have occurred in the Eternal City, Professor Carlo Maggiori has returned to his post, and was received with enthusiasm both by his colleague and by the students. Dr. Pantaleoni, who, being banished by the Pope, had for some years been practising at Nice, has been appointed Inspector of the Hospitals of Rome; and Dr. Toscani, a third exile, has been added to the Committee of Prison Inspection.

DURING the last week Messrs. Henry Graves & Co. have presented twelve valuable engravings for the walls of the sitting-rooms of the National Hospital for Consumption, at Ventnor, Isle of Wight; and the funds of the institution have been increased by a collection at Holy Trinity Church, West Cowes, amounting to £8 12s. 6d., and at SS. Philip and James's Church, Leckhampton, near Cheltenham, when the sum of £16 9s. 11d. was obtained.

THE "Dublin Gazette" of last week announces that her Majesty's letters patent have passed the Great Seal of Ireland, appointing the Marquis of Kildare to be Chancellor of the Queen's University in Ireland. The vacancy was occasioned by the death of the late Earl of Clarendon.

EYELESS FISH.—Four of these strange creatures have been presented to the Dublin Zoological Gardens, by Dr. Mapother, who obtained them from the Mammoth Caves of Kentucky during his late tour in America.

MARGARET WATERS, the convicted baby-farmer, was hanged within the walls of Horsemonger-lane prison on Tuesday morning last.

THE PRESENT MEDICAL STAFF OF THE PRUSSIAN ARMY.—The *Allg. Med. Centr. Zeit.* of Berlin (No. 76, 1870) gives the following figures:—One medical officer for every 500 men. Besides this there is a special body of surgeons intended for the sick and wounded in the field, which body is called the sanitary detachment. Every corps of the army is followed by twelve field hospitals, each completely organised for 200 patients, so that every corps is provided with the means of treating 2400 wounded. Each corps has besides a reserve, composed of three surgeons and three assistant-surgeons. There are also 200 civil surgeons, who have volunteered their services, attached to the army; and most of the great medical and surgical authorities of Germany have been appointed inspectors and consulting officers to the army sanitary department. Altogether there are about 2700 medical men in active service with the German host. We find, however, in another part of the same paper that the Secretary at War has decreed that all medical men, who have chosen to serve as militants, should leave the fighting portion of the army, and take up medical duties, thus showing that surgeons are not too numerous.

Medical Appointments.

BARNHAM, F., M.R.C.S.E., has been appointed Medical Officer of Health for Maidstone.

BIRT, G., M.R.C.S.E., has been appointed House-Surgeon and Secretary to the Stourbridge Dispen. ary, vice J. R. Ireland, M.R.C.S.E., resigned.

BOND, E. B., M.D., has been elected Lecturer on Materia Medica at the Ladies' Medical College, Great Portland-street.

BOWER, W., M.R.C.S.E., has been appointed Medical Officer for the Blankney District of the Sleaford Union, Lincolnshire, vice H. S. Mackeson, M.R.C.S.E., resigned.

BUCK, T. A., M.B., has been appointed Senior Assistant Medical Officer at the Gloucestershire Lunatic Asylum near Gloucester.

DONOVAN, J., M.D., has been appointed Assistant House-Surgeon to the North Dispensary, Liver ool, vice Brierley.

EVANS, T. W., M.R.C.S.E., has been appointed Hon. Medical Officer to the North Dispensary, Liverpool, vice A. Whittle, M.D., appointed Physician to the Stanley Hospital.

FALLS, W. T. B., L.K.Q.C.P.I., late House-Surgeon to the Warrington Dispensary, has been appointed Assistant-Surgeon at the Tredegar Iron Works, Monmouthshire, vice J. W. Barry, L.R.C.P.L., resigned.

FORD, W. B., L.R.C.P.Ed., has been appointed Medical Officer for District No. 3 of the Wolverhampton Union, vice Lt. J. Summers, L.R.C.S.Ed., deceased.

HARPER, Mr. W. J., has been appointed Resident House-Surgeon at the Tiverton Infirmary and Dispensary, vice Vaillant, resigned from ill-health.

HEAPS, J., L.R.C.P.Ed., has been appointed Medical Officer for the Loftshouse-with-Carlton and the Thorpe Districts of the Wakefield Union.

HEDGES, J. A., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Farnborough District of the Hartley Wintney Union, vice W. J. Mickle, M.R.C.S.E., resigned.

HILL, Mr. H. W., has been appointed a Resident Medical Officer at St. Mary's Hospital and Dispensary for Diseases of Women and Children, Manchester.

HOBBS, E., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Wallingford District and the Workhouse of the Wallingford Union, vice J. Pickett, L.R.C.P.Ed., resigned.

JENNINGS, O. H., M.R.C.S.E., has been appointed Medical Officer for the Marshfield District of the Newport Union, Monmouthshire.

LLOYD, A. E., L.R.C.P.Ed., has been appointed House-Surgeon to the North Riding Infirmary, Middlesborough-on-Tees, vice J. Lloyd, L.R.C.P.L., resigned.

MORRIS, W. J., M.R.C.S.E., late House-Surgeon to the Glasgow Royal Infirmary, has been appointed House-Surgeon to the South Dispensary, Liverpool, vice Crotty.

PHILIP, J. A., M.A., M.B., C.M., has been appointed Junior Assistant Medical Officer at the Gloucestershire Lunatic Asylum near Gloucester.

RAINE, G. E., M.B., has been appointed Medical Officer for the Great Burstead District of the Billericay Union, Essex, vice G. W. Raine, M.R.C.S.E., deceased.

RICHARDS, G., L.R.C.P.Ed., has been appointed Medical Officer for the Begelley District of the Narberth Union, Pembrokeshire, vice T. H. Newsam, L.R.C.P.Ed., resigned.

RONALD, R. W., M.D., has been elected President of the Glasgow Southern Medical Society.

SMART, D., L.R.C.P.L., has been appointed House-Surgeon to the Surrey Dispensary, Great Dover-street, vice F. W. Smith, L.R.C.P.L., resigned.

STRATHY, F. R. L., M.D., has been appointed Assistant-Surgeon to the Leith Hospital, vice Marion, resigned.

WALLIS, F., M.R.C.S.E., has been appointed House-Physician at the Westminster Hospital, vice T. May, L.S.A.L., whose term of office has expired.

WARBURTON, E. S., M.R.C.S.E., has been appointed Assistant House-Surgeon to the South Dispensary, Liverpool, vice Mason.

Births, Marriages, and Deaths.

BIRTHS.

AUSTIN.—On the 10th inst., at Lingfield, Surrey, the wife of Sydney C. Austin, of a daughter.

BRANDER.—On the 3rd inst., at Inzievar House, East-end, Finchley, Middlesex, the wife of Dr. John Brander [last week erroneously printed "Brande"], of a son.

CHAPLIN.—On the 29th of Aug., at Jerusalem, the wife of Thomas Chaplin, M.D., of a daughter.

DEBENHAM.—On the 5th inst., at Presteigne, Radnorshire, the wife of Horace K. Debenham, Esq., of a daughter.

HARRISON.—On the 10th inst., at Willesley House, Hawes, Yorks, the wife of J. A. Harrison, M.D., of a son.

KIRK.—On the 6th ult., at Maximilian Strasse, Vienna, the wife of J. W. Kirk, M.D., of a son.

MILWARD.—On the 25th ult., the wife of James Milward, M.R.C.S.E., of Cardiff, of a daughter.

MARRIAGES.

GRAYDON—MAXTON.—On the 1st inst., at St. Peter's Church, Dublin, S. J. Graydon, M.D., of Withington, Manchester, to Olivia Anne, youngest daughter of the late Wm. M. Maxton, Esq., of Woodlands, Mullingar.

JEFFERISS—FORBES.—On the 12th ult., at London-street, Edinburgh, Walter Robert Spence Jefferiss, M.B., C.M., L.R.C.P. & S. Edin., son of Dr. R. Jefferiss, of Dalkeith, to Janetta Jessie Donolia, daughter of the late John Forbes, Minister of Sleat, Skye.

SINCLAIR—HAMILTON.—On the 1st ult., at Christ Church, Simla, Edward M. Sinclair, M.D., Surgeon Royal Artillery, to Annie Catherine, second daughter of Andrew Hamilton, Esq., of Raglan-road, Dublin.

TYLEY—WOLLEN.—On the 20th ult., at Wedmore, Somerset, Rich. Purnell Tyley, M.D., &c., to Elizabeth, daughter of Joseph Wollen, Esq., J.P., of the Hall, Wedmore.

DEATHS.

BIRNIE.—On the 4th inst., W. Sharp Birnie, M.B., C.M., of Blackford Brow, Bury, aged 34. Friends will please accept this intimation.

HOWELLS.—On the 5th inst., at Kennington-cross, Thomas Howells, M.B., formerly House-Surgeon at King's College Hospital, aged 28. Friends will please accept this intimation.

KING.—On the 29th ult., at Kettlewell House, near Woking, Wm. King, M.D., F.R.C.S., aged 84.

KNIGHT.—On the 29th ult., at Brighton, Thomas Knight, M.D., &c., of Birill, aged 37.

LACY.—On the 7th inst., E. Lacy, F.R.C.S.E., of Poole.

MURRAY.—On the 5th inst., at Lowther-street, Whitehaven, Charles Murray, Surgeon, aged 63.

TURNER.—On the 4th inst., at Arle, Cashelmore, Henry Turner, M.R.C.S.E., Assistant-Surgeon Scots Fusilier Guards.

Notes, Short Comments, and Answers to Correspondents.

"HOSPITAL SUNDAY" IN LIVERPOOL.

SOME remarks which we made three weeks ago upon this subject have, it seems, moved the Rev. T. B. Banner, of Liverpool, to address a letter to the *Albion*, in defence of the system of annual Sunday collections for charities hitherto adopted in that city, and in vindication of himself against what he deems an unjust insinuation on our parts. Mr. Banner may rest assured that we have not the slightest wish to deal unfairly with him; and when he says that he is not responsible for the manner in which the proceeds of the collections have been apportioned, we at once accept his disclaimer, and admit that he is free from any suspicion of interested motives, which might be suggested by the fact (not denied) that a certain institution with which he is connected has obtained what appears to us to be a disproportionate share. We have already devoted more space than might reasonably have been expected of us to the promotion of a genuine "Hospital Sunday" for Liverpool, and must therefore leave Mr. Banner's arguments on the general question to be dealt with locally by those who are interested in the matter. If he is satisfied with the results of past years, and can succeed in inducing his fellow-townsmen to be satisfied also, well and good. Liverpool is nearly half as big again as Birmingham, and its inhabitants are reputed to be proportionally far more wealthy; yet in twenty years "Collection Sunday" (as we prefer to call it) in Liverpool has produced but £20,000, while "Hospital Sunday" in Birmingham has produced the same amount in five years. Before we leave Mr. Banner, however, we may just ask him if he really believes that, as between a medical institution like the Royal Infirmary, and a non-medical institution like the Blue Coat Hospital, the number of "inmates" (so called) constitutes any equitable basis of apportionment? Such an idea is simply preposterous.

Dr. J. B. Gill, (Dover.)—We regret that we are unable at the moment to afford the information desired by our correspondent. We may, however, be enabled to supply it in our next issue. He is surely mistaken as to the work having been reviewed in our columns.

Mr. Wood's inaugural lecture on Surgery will appear in our next impression.

MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—Your correspondent, Mr. M'Naughten O'Keeffe, must either have a very hazy notion of professional etiquette, or he has allowed his veracity to suffer through some cause or other better known to himself than to me, in relating the case which it has pleased him to bring so prominently before the profession. In this case, as in many others, the old adage is true, that "one story is good until another is told."

On Wednesday afternoon, Sept. 28th, I was requested by Mr. P—— to see his wife either that afternoon or on the following morning. I replied that it would be impossible for me to see his wife on the following morning, as I had to accompany a patient to Bowden to consult with a London physician; but that I had to visit some Works in the vicinity of his residence, and would call and see her. I went by train to Appleton, and, returning, visited Messrs. Pilkington and Hutchinson's Works, which are at a considerable distance from Mr. O'Keeffe's house. On my arrival at the patient's house, I could find no messenger to send for Mr. O'Keeffe, whose residence is one mile and a quarter from that of the patient. I advised the patient to continue the treatment, and, in addition, recommended that she should have a draught of chloral hydrate at bed-time, she having had no sleep for the two preceding nights.

And now I must refer to a consultation (however painful it may be) that I had with Mr. O'Keeffe in April last about a member of this same family. When glycerine and carbolic acid were recommended to be used as a local application, he said he did not keep such drugs, and would be much obliged if I would send the preparation from my own surgery, which I did, and desired him to enter it in his account; and on the present occasion it seemed to me that there was not much probability of his having chloral hydrate, and sent the patient a draught mixture on my own responsibility.

I arranged with the patient to meet Mr. O'Keeffe on the following Friday, and would have been glad then to have offered any explanation that would be considered necessary did not his ungentlemanly and unseemly conduct on a railway platform preclude the possibility of my doing so. My salutation to him was greeted by most unprofessional language and demeanour. He then followed me from one side of the railway platform to the other, when I told him I should decline to have any further intercourse with him. In reply to a question put to the husband, "Did Mr. O'Keeffe propose a consultation?" he replied, "Never to me, and I was not aware that he had proposed a consultation to anyone till you had seen my wife."

The above is the case in detail, and with it must close this correspondence, and leave an unbiased profession to judge for themselves.

Your obedient servant,

Runcorn, October 12th, 1870. ROBERT H. MOURITZ.

PATENT SURGICAL SILK CORD.

WE have been supplied with a specimen of this cord, which appears to us to be very good, by Messrs. Arnold and Sons, of West Smithfield, London. It is composed of pure silk only, free from all dressing or colouring matter. Being of a plaited texture, its strength is considerably increased. It can be supplied either in hanks or wound on a neat little tablet, in cases containing four assorted sizes, so as to suit the pocket. The price of the patent silk cord per hank is 1s.; of the tablet and case with the four sizes, 1s. 6d.

Medicus.—The General Lying-in Hospital, York-road, Lambeth.

"MISLEADING ADVERTISEMENTS."

WE have received a letter from the Solicitor of "Medicus" (Wadebridge), who recently inserted in our columns an advertisement of a practice for sale, in which it was stated that there was "no legally qualified medical man in the district." He complains of a letter which appeared in our last impression, signed "Veritas," in which it was alleged that there were "within a comparatively small radius from twenty to thirty gentlemen in actual practice." Prior to the receipt of the last-named communication, one from another correspondent had reached our Office. Both letters were authenticated by the names of the writers. If "Medicus" has suffered from the promulgation of erroneous statements, we can only regret it, and express our perfect willingness to insert any correction; but we are bound to state that we took all the precautions in our power. We referred to the Medical Directory, and found the names of four qualified medical men practising in Wadebridge. The Solicitor of "Medicus" demands the real name of "Veritas," which, however, he must be aware we could not give him without the permission of its owner.

Mr. J. Waring-Curran.—The work can be obtained by order of any London bookseller; or of Nimmo and Co., Edinburgh.

ON THE TREATMENT OF GONORRHŒA AND GLEET.

To the Editor of THE LANCET.

SIR,—Will you permit me to add in the columns of your journal my testimony to the soundness of Mr. Skey's views on the pathology and treatment of gonorrhœa and gleet?

I have for a long time past been impressed with the fact that positive results were rarely or never obtained by carrying out the usual and certainly only too well beaten track of treatment of these diseases, which formed Mr. Skey's subject for his recent and most interesting clinical lecture. Not only are the facts brought forward in Mr. Skey's lecture tenable logically, but nearly twelve years' experience, hospital and otherwise, in the treatment of this class of enthetic disease enables me to affirm that they are positively and incontestably correct in every particular. The result of my experience in the treatment of gonorrhœa and gleet by depletive remedies may be briefly stated to have been, on the whole, unsatisfactory, although I most religiously stuck (I admit against my own conviction) to the line of treatment laid down by standard authors and authorities, and I kept myself informed of all the latest "tips" which are furnished from time to time by the numerous contributors to the leading medical journal on this as on other subjects. Still my cases did not do as well as my books (not my experience) taught me they should have done. They all got well certainly *in time*, from six to eight weeks, and so they would if nothing at all had been done for them, rest only being enjoined; and as it may not be altogether uninteresting to some of your readers to learn how I have arrived at such heretical conclusions, I will as briefly as possible inform them.

There are a class of patients in military practice for whom no hospital accommodation whatever is provided, and it is to this class of patients more particularly I am indebted for the experience which enables me to affirm in the most positive manner that the depletive line of treatment of gonorrhœa (by which I mean purgation, blistering, &c., reduced animal and vegetable diet, together with total abstinence from all fermented and vinous drinks) is, to say the least of it, unsatisfactory in its results. I have on numberless occasions had to complain that many of my out-patients (officers) had not complied with my injunctions to abstain from alcoholic drinks while suffering from gonorrhœa; but that, on the contrary, as the undecided poise of an empty soda-water bottle and the semi-corked "Sullivan" (there was not time for their removal before my morning visit) too plainly indicated, the doctor's advice had been set aside, and that the patient had adopted a line of treatment of his own, which, however repulsive to science, turned out to be beneficial to the individuals in question. On my complaining that my orders had evidently not been carried out, and adding the usual paternal sentence, "Of course you will suffer for it," I was invariably met with this kind of astounding reply: "Not at all, my dear fellow; I slept well last night for the first time since I have been on the sick-list; I had no chordee, and made water in the morning with much less pain than usual; and, in fact, I feel altogether better." If such statements as these, the correctness of which it is unnecessary for me to say I vouch for, do not go a considerable length to prove that the depletive treatment of gonorrhœa is wrong in theory, as results in practice have established, I am at a loss to know what does, and one can only wait for some abler solution of the vexed question than that so recently given by Mr. Skey.

From the foregoing remarks it may be imagined that I advocate the administration of fermented and vinous drinks as a necessary part of treatment in gonorrhœa. Nothing of the kind. I merely contend that to reduce gonorrhœal patients' diets to almost a minimum, as was wont to be the case, and at the same time to deprive them of their beer or wine in moderation, is simply wrong, as it has been conclusively proved to be.

Mr. Skey doubts the soundness of the theory that gonorrhœa in the male results from intercourse with a woman suffering from that disease. I concur with him. I have on occasions, extending over a considerable period, been requested by women who were living under the protection of those who subsequently became the subjects of gonorrhœa, and who stated that they could not have contracted the disease except from their mistresses, to examine them with a view of establishing their innocence. I have complied with their requests, and rarely has Mr. Skey's recently expressed opinion been invalidated by the result of my examinations, for only in one case could I trace the existence of any purulent discharge; but each woman had, on inquiry, informed me that connexion had taken place just after the catamenia had passed off. From the very imperfect statistical knowledge I possess on this point, I am at present only in a position to state that, little as that amount may be, it goes some way to prove the scientific correctness of Mr. Skey's statements. It may possibly be asked why I waited until so eminent a surgeon as Mr. Skey published his views on the pathology and treatment of gonorrhœa before I promulgated mine. My answer is simply that I was not prepared for that avalanche of scientific indignation which experience has taught me awaits any humble or recalcitrant member of the profession who is foolhardy enough to move out of the established groove.

I am, Sir, yours faithfully,

J. CARTER MURPHY, L.R.C.P.I.,

Chatham, Sept. 28th, 1870. Assistant-Surgeon, Royal Engineers.

BRITISH IMPERIAL INSURANCE CORPORATION.

THE Third Annual Report of this Association has been forwarded to us, we suppose, in order that we may notice the fact of its steady growth, evidencing an increasing amount of confidence on the part of the insuring public in the principle of Government security to policyholders for the premiums paid. As this principle originated with a member of our profession, Dr. W. FARR, we naturally watch its development with interest, and are glad to note its success. It is a characteristic of the British Imperial Association that it publishes annually an audited list of every policy in force, showing its present value to the policyholder, who is thereby enabled to see exactly what amount he could get for the surrender of his policy.

Dr. Williams, (King's Lynn.)—Parkes's System of Hygiene will probably answer both purposes.

THE letter of *An Old St. George's Student* shall receive attention in our next.

THE APPLICATION OF PRESSURE TO THE UTERUS IN CASES OF LINGERING LABOUR.

To the Editor of THE LANCET.

SIR,—With reference to Dr. Playfair's paper on the above subject, the practice is recommended, and the method of applying it described, in a work by J. R. Pretty, M.D., which is entitled "Aids during Labour," and was published in 1866.

Since 1866, I have been in the habit of using manual pressure to the uterus during the second stage of labour, and find that, first, the grasping pressure of the hand strengthens and prolongs the pains, thereby shortening the labour, and doing away with the use of the forceps in many tedious cases; 2ndly, by securing an efficient contraction of the uterus after the birth of the child, it hastens the expulsion of the placenta, and prevents hæmorrhage. I find the pressure is most easily applied in the ordinary position.

I am, Sir, yours truly,
Lincoln, October 8th, 1870. JOHN MACDONALD.

To the Editor of THE LANCET.

SIR,—It is with pleasure I observe author after author recommending a method of practice in midwifery that I have steadfastly used for several years in powerless labour. This method suggested itself to me from the great assistance pressure exercises in retained placenta, and it is one that might be thought of as frequently as the forceps. I believe Dr. P. Smith has invented some kind of apparatus—the use based upon Professor Haughton's investigations—as to the power of the uterus and the abdominal muscles in labour. But I can confidently assert that the simple gentle pressure exercised by the hands is quite sufficient for the end in view.

Your obedient servant,
Ashford, Kent, October 6th, 1870. A. H. MORRELL, M.R.C.S.E.

To the Editor of THE LANCET.

SIR,—I have found the following method most useful in cases of long-continued labour dependent upon want of uterine force and contraction:—To place a roller-towel around the abdomen of the patient over the fundus uteri, and to bring the ends together behind (or tie them), and give to the nurse to hold; this bandage to be tightened as each pain recurs. I also occasionally assist the pains by either making pressure with my arm around the abdomen, or with my hand over the fundus. This method, although a little laborious, I consider better than any mechanical means, as it can be so easily graduated. The great objection in using the proper binder is, that it will, if any traction is used, be twisted into a sort of rope, and so be useless after the labour is over.

Yours obediently,
Newcastle-on-Tyne, Oct. 8th, 1870. W. H. BRECKNELL.

Dr. Pearson writes to us in a tone of complaint that he should have been alluded to in a question of medical ethics. This tone does not seem to us reasonable in the circumstances. Dr. Pearson's account of the facts does not call for any alteration in the opinion we expressed. He denies that he ever refused to meet Mr. Crerar or any other brother-practitioner.

L. M.—None of which we are aware.

Bald Pate.—We do not prescribe. Our correspondent had better take the opinion of a physician.

LEFT-HANDEDNESS.

To the Editor of THE LANCET.

SIR,—*Apropos* of the discussion upon left-handedness, and more particularly in reference to the letter from Mr. Cooke in this day's LANCET, allow me to refer your readers to the passage in "Trench on the Study of Words," which runs thus: "The left hand, as distinguished from the right, is the hand which we 'leave,' inasmuch as for twenty times we use the right hand, we do not once employ *it*, and it obtains its name from being 'left' unused so often."

My own impression as to the reason of the right hand being so universally employed is, that it is simply a matter of education (an educational process, too, which has been going on for centuries); since my own observations lead me to believe that infants and young children are equally "handy" with both members; but that any tendency to use the left hand in taking food or playthings is instantly corrected by the nurse refusing to give them unless the conventionally proper hand be held out. And there are reasons why education should point this way, since all our mechanical and domestic appliances are constructed on the supposition of the right hand being the principal agent in their use; and in writing, no matter how ambidextrous one may be, we cannot, with our present mode, be equally facile with both hands. As it is, we write in a direction outwards, from left to right; whereas with the left hand we should write inwards, with a tendency to cross over the hand sustaining the paper; and this would be as awkward in appearance as in reality, the only remedy for which would be to write from right to left, as in Hebrew, Arabic, &c., a mode of writing manifestly impracticable with our present style of logography. Let anyone, writing with the left hand, make a number of straight lines on a piece of paper; he will find it much easier to make them, as I have said, in a direction outwards, from right to left, than in the opposite direction; consequently there are reasons cogent enough for educating the right hand to the exclusion of the left.

I am, Sir, yours truly,
Barsiem, October 8th, 1870. JOHN ALCOCK.

WEST NORFOLK AND LYNN HOSPITAL.

THE weekly advertisement of the names of the medical staff looks ostentatious; but we have no doubt it is quite undesigned on the part of the gentlemen whose names are so advertised. The plan is part of a system for which the medical men are not responsible. It should be discouraged by the members of the staff of hospitals.

A Subscriber.—Our attention has been frequently directed to the subject. As our correspondent correctly states, the advertisement of the Institution for Diseases of the Skin occupies a prominent place in the advertising columns of many papers, and the private address of the physician is never omitted. We do not admire this sort of practice, and we concur in thinking it open to grave objections.

Mr. Thomas Warner, (Cirencester.)—The narrative of the case of Laura Bridgeman formed, we believe, the subject of a tract published by Messrs. Chambers, and may probably be obtained from them or their agents.

Bolus will obtain the information on application to the Director-General of the Army Medical Department.

C. D. had better make an application to the Turkish Embassy.

HOSPITAL ABUSES AND GENERAL PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—When writing on the subject of "Hospital Abuses," I have before remarked the great danger the general practitioner is placed in, unless he is careful to watch the current of events and look to his own interests. The Report of the Sub-committee on Special Hospitals fully bears me out in this particular. These are some of its conclusions. I will name a few, without comment in the first place, for general consideration. Voluntary donations have ever grievously failed on the part of those receiving benefit from hospital attendance, in one place reaching in one month the sum of threepence. The class attending special hospitals are declared to be above the class of paupers. There should be an effort made to prevent people pauperising themselves, as hospital attendance invariably leads them to a loss (?) of self-respect. A graduated scale of payments according to the ability of patients, where it has been tried, had been found to answer well. One hospital declares, what all hospitals practically endorse, that such patients as present cases of destitution are not admissible, however recommended. This, in face of the fact that nine-tenths of moneys collected for and bequeathed to such institutions is given to the poor, in the broadest sense of the term, in the deluded supposition that the poor are to reap the benefit. "Clearing off" kind of work, as practised among out-patients at hospitals, is bad for them, bad for the profession, and worse for the students who watch the proceedings. Two-thirds of the medical men who sent in replies declared medical officers should be paid for their work. One gentleman wanted to be independent, and the patients those only who cannot pay. Now, why could not the said gentleman take office under the Board of Guardians? He would have the very class he wanted, and you may be sure the guardians would leave him independent enough in consideration of such very cheap service. All this and much more in the same strain, without one thought for the unattached part of the profession for its real interests. But the two following remarks show us what we are thought of, and how we are to be treated by hospital men. The abuse of hospitals is laid to our charge. A physician writes: "As regards the abuse of hospitals, it appears to me that the best remedy is the better education of the general practitioners. The apprenticeship system is gone (a good thing too), and real examinations are only just beginning as regards the general practitioner." What right has the said physician to imply want of education in us more than in himself? Were we not educated in the same schools? And did we not pass the same examinations? I would undertake any day to find as large a proportion of well-educated men among general practitioners as among our self-asserting consultants. For is it not a fact that the office of physician or consulting surgeon is one of self-assumption? There is no official recognition of his position beyond what he takes upon himself, or circumstances have led him to. Does not the one-portal system, about which the profession is agitated, ignore this superiority? On the other hand, it will not prevent the best men rising to the surface by their own proved ability in the battle of life; whereas at present our numerous schools do tend to give an artificial distinction, often not borne out in results. How can we be said to be the cause of hospital abuse, when the rich leave their money for the benefit of the poor without consulting the profession at large as to the best means for its outlay, and allowing the whole to be spent for the benefit of a jealous clique, who take care no one shall reap the advantage but themselves, excepting what they, of necessity, must give to students? If general practitioners are fit to attend the public at large, they certainly could manage their share of public medicine in towns, instead of the dog-in-the-manger principle of leaving hospital men more work than they, by their own confession, can undertake.

What does the Report say concerning the professional use *of* out-patient departments of special hospitals, and no doubt the general hospitals also? After educating the student, "it is required for the education of consulting practitioners." Why not of general practitioners, on whom fall the onerous duties of the profession? Why should these, after the theoretical examinations necessary for entering the profession, be kept in ignorance of the progress of science, and be excluded from the immense advantages our public institutions afford? A medical man's education is never finished. Why then should only a small minority enjoy the best advantages for continuing that education when there is room enough for all? I repeat, it would not prevent the best men obtaining every position they could desire, or that they desire. This effect it would have: we should have the crumbs gathered from the whole cloth, instead of, as at present, from a few educated most unfairly from their youth up for the purpose; the place more often making the man than the man the place. Under these considerations, I think our various committees of inquiry might add yet another question. What reason can be given why general practitioners should not participate in the whole medical labour (public as well as private) of towns, the same as they undertake it in rural districts? The injustice will become ten times more oppressive when this lawful agitation for payment on the part of patients for services rendered and payment to medical men for work performed becomes, as it shortly must, a *fait accompli*. When will our executive Medical Council arise to breathe order into the chaos of medical polity? Not until it is representative in character.

I am, Sir, yours, &c.,
October, 1870. PERCY LESLIE, M.D.

THE APPLICATION OF CAUSTIC TO ENLARGED TONSILS.

A Surgeon writes to say that he has found, in the case of children, that the application of caustic to the elongated tonsils is productive of great benefit, and that it is a preferable mode of procedure to that of operation by bistoury or guillotine, which should be employed in the case of adults, with whom the caustic treatment is unsatisfactory.

Mr. C. Hogg.—Our correspondent is thanked for his offer of a copy of Mrs. Stephens's receipt for stone and gravel, for which she received a Government grant in 1739, but which we must decline, as we could not devote "two columns" to such a subject.

Corpus.—The work by Mayne is very full. Fowler's Medical Vocabulary published by Renshaw, Strand, would probably meet our correspondent's requirements.

MEDICAL ETHICS.

To the Editor of THE LANCET.

SIR,—MAY I beg of you to insert this letter in your issue of this week, relative to that of Mr. Edis, of October 1st. I am certainly surprised that Mr. Edis should have ventured to address you at all in the way of complaint, when I remember that he made to me (the family medical attendant in the case alluded to) at the house of the deceased, where the inquest was held, an apology for what I cannot call other than boisterous conduct on his part there. But as he has addressed you, and in the same letter raised the question as to whether the apoplexy *caused* the fall, or the apoplexy *was the effect* of the fall, he should at the same time have stated, as delivered in evidence, that in addition to the clot of blood pressing upon the spinal cord, there also existed in connexion with this, at the same spot, a partial rupture of the sheath of the cord. This additional information cannot but be considered as very necessary to enable a correct opinion to be arrived at as to which was cause and which effect.

I am, Sir, your obedient servant,

Westbury-on-Severn, Oct. 12th, 1870. N. S. GRANT.

To the Editor of THE LANCET.

SIR,—As the surgeon who conducted the post-mortem examination in the inquest alluded to by Mr. Edis in your impression of last Saturday, I beg to state that I knew nothing whatever of his connexion with the case until I was actually engaged in the duty required of me by the coroner. Mr. Edis was aware of this; and therefore I am surprised that he should have written the letter which has called forth your editorial remarks; and, from the conversation he held with me, I am astonished that he should have sent to you any communication which could subject my conduct to unfavourable comment.

I am, Sir, yours obediently,

Gloucester, October 6th, 1870. A. PLEYDELL CARTER.

*** Mr. Carter's letter goes far to excuse him for not informing Mr. Edis of the post-mortem, though, provided that he ascertained Mr. Edis's relation to the Insurance Office at an early stage of the post-mortem, we think, considering the extreme interest and great importance of the case, he should, if possible, have endeavoured to procure the presence of Mr. Edis before completing the post-mortem examination. Mr. Edis's complaint is directed rather against the family surgeon, who, he says, was present at the autopsy, and knew that he represented the Assurance Association.—ED. L.

Messrs. Fox and Co., (Manchester.)—We would advise our correspondents to apply to the authorities of the hospitals named by him. If they will furnish us with a small supply of the articles mentioned, we shall be happy to try them, and record the results.

Cymro should consult the little work of Mr. Napper, of Cranleigh.

Mr. Fred. Goodchild.—Too late for this week.

Une Prêteuse.—We should advise our fair correspondent to try one of Thomas's patent elder-down corsets. They are very warm and light. For invalids they are especially adapted.

HIGHGATE INFIRMARY.

To the Editor of THE LANCET.

SIR,—I find in your number of last week, where you notify my appointment to the above infirmary, you state that I was formerly house-surgeon to Charing-cross Hospital. This is an error. I held the offices of resident medical officer and registrar.

Yours obediently,

October, 1870. THOMAS S. DOWSE.

Mr. H. B. Kiernander.—We are sorry we cannot comply with our correspondent's request, which is of an unusual kind. The case is not one that should possess any obscurity to an ophthalmic surgeon.

Mr. W. J. Marsh.—Odling's or Attfield's.

Dr. Fairbank, (Lynton.)—We have not received the book; otherwise we should have been glad to notice it.

Mr. Henry Lyons.—Consult a respectable physician.

Mr. Frederick Page should, if registered, demand a fee; and, in cases where there is any doubt, should refuse to give an opinion unless a post-mortem is allowed.

PAY OF ASSISTANTS.

To the Editor of THE LANCET.

SIR,—Seeing the letter of Mr. Atkinson in your impression of October 1st, I wish to observe that the only way to remedy the evils he complains of is the formation of a Medical Assistants' Protection Society. The principal features of such a Society would be that assistants would not receive less than a stated salary agreed upon by them. Secondly, to provide a weekly sum when out of employment or unable to attend their duties through illness. I shall be happy to become a member of such a Society, and hoping several other assistants will join me in this movement,

I am, Sir, yours respectfully,

Neath, October 4th, 1870. W. D. MOORE, Jun.

P.S.—I have by me a copy of the Rules of the Benevolent Assistants' Association, which was established and registered under the Friendly Societies Act in 1861; but it fell to the ground through the assistants not supporting it. Dr. Tanner was President.

Idiotes.—There are no facts to warrant the conclusion being drawn that the use of garden fruits and vegetables, whose growth has been stimulated by house sewage, is injurious. It is extremely improbable, where the elements of sewage have been transformed by the systems of the vegetables, that these should be injurious. If grass supplied to cattle be too rich and stimulating, it may, no doubt, act injuriously; but then so may a rich and stimulating diet on human beings. If the sewage-grown grass be mixed with other grass, its consumption is unattended with harm. Much depends upon the way in which the sewage is managed. If the supply of sewage matters be too abundant for the crops to take up, these are made what shepherds call "stenchy"; but that is the fault of the farmer.

1870.—The possessor of the title named cannot in strict right claim to be styled "Doctor." As a matter of fact, he is often called Doctor, but only from courtesy. The University of London expressly provides that those of its graduates who possess the degree of Bachelor of Medicine only shall not use the title of Doctor.

ASYLUM FOR ATTENDANTS UPON THE INSANE.

To the Editor of THE LANCET.

SIR,—Can any of your readers inform me whether there is an institution or charity in existence where aged and disabled attendants upon the insane of undoubted good character can seek repose or assistance in their declining days?

I am, Sir, yours obediently,

S. CASTWRIGHT REED, M.D.

Munster House Asylum, Fulham, Oct. 8th, 1870.

J. W., (Shepton Mallet.)—Unless there was evidence that the individual, by the use of some medical title, represented himself as legally qualified, we much doubt whether he could be successfully prosecuted under the Act.

Mr. J. Sheffer.—Consult Dr. Spencer Cobbold's work on the subject.

WE have been compelled to defer answers to several correspondents until next week.

COMMUNICATIONS, LETTERS, &c., have been received from — Prof. Tuson; Dr. J. Russell Reynolds; Mr. Cope; Dr. Anderson; Mr. Marsh, Salisbury; Mr. Foltborp; Mr. Shedden; Mr. M'Ghee; Dr. Tassell; Mr. T. E. Carroll, Parkhurst; Mr. Newman; Mr. W. Whalley, Bradford; Dr. Jackson, Leamington; Mr. Carter, Gloucester; Dr. Vinen; Dr. Harding, Whittlesea; Mr. R. Tyley, Wedmore; Dr. Jones, Queensland; Mr. G. Chunder Roy; Dr. Martin, Walkden; Mr. Cooke; Mr. Debenham, Presteigne; Mr. Gray; Mr. Boyd; Mr. Griffiths; Mr. Staniland; Dr. Gill, Dover; Dr. Allcock, Liverpool; Mr. Argles, Edmonton; Mr. Brown; Dr. Neild, Melbourne; Mr. Matthew, Natal; Dr. Mackintosh; Mr. Hughes; Mr. Myers, Louth; Dr. Britton, Driffield; Mr. Kenion; Mr. Keys; Mr. Couldrey; Mr. Lyons; Mr. Burton; Mr. Sinclair, Hulme; Dr. Leslie, Birmingham; Mr. Warner, Cirencester; Mr. Stowe, Mr. Breton; Mr. Green, Tewkesbury; Mr. Jukes, Halifax; Mr. J. Swinton; Mr. Corbett; Mr. J. Aveney; Mr. Macnamara, Castlebar; Mr. James; Dr. Harrison, Hawes; Mr. Waring-Curran, Mansfield; Dr. Chaplin, Lewes; Mr. Morris, Liverpool; Dr. Borham, Halstead; Mr. J. Davies, Market Drayton; Mr. Wright; Mr. J. Merson, Sedgefield; Dr. Brecknell, Newcastle-on-Tyne; Mr. Jones, Lampeter; Mr. Alcock, Burslem; Dr. Reed, Fulham; Mr. Gordon; Dr. Lambie, New Cumnock; Mr. Sheffer; Dr. Brander, Finchley; Dr. Williams, Lynn; Mr. Kilner; Dr. Dickson, Buxton; Mr. Moore; Mr. Laurence; Mr. Dowse, Highgate; Mr. J. Gamgee; Mr. Crook; Dr. Newnham; Mr. R. H. Mouritz, Runcorn; Dr. Goate, Coventry; Dr. Manson, Howden; Mr. H. Wotton, Kensington; Mr. Kelly; Mr. Jackson, Walton; Mr. Austin, Lingfield; Mr. W. Sheen, Wakefield; Mr. Philips; Mr. Watson; Mr. Davys; Mr. Bland, Munster; Mr. Kiernander; Mr. Gorham, Tunbridge; Dr. Kirk, Vienna; Dr. Hume, Jamaica; Mr. Binney; Mr. Maxwell, Stirling; Mr. Corner; Mr. Preston; Messrs. Whittle and Co.; Mr. Thomson, Walsall; Mr. Hewett, Sidmouth; Dr. Allen; Mr. E. J. Smith; Dr. Heron, Margate; The British Imperial Insurance Corporation; Corpus; Medicus; J. W.; F.R.C.S., Edinburgh; S. S.; L.M.; Luton; G. G.; C. W. L.; An Old St. George's Student; B. P.; L.R.C.P.; L.A.C. & M.R.C.S.; Iota; C. C. N.; A Country Vicar; P. J. H. The Royal Institute of British Architects; Cymro; &c. &c.

Birmingham Daily Gazette, Shield, Scotsman, Croydon Chronicle, Liverpool Daily Courier, Brussels Journal de Médecine, Glasgow Herald, Builder, Australian Medical Gazette, Surrey Comet, Melbourne Age, Circular, Lincoln Journal, Coventry Standard, Lincoln Mercury, Torquay Times, Waterford Journal, North China Daily News, Newcastle Daily Journal, and *Journal of the Scottish Meteorological Society* have been received.

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